# **EGLIN AIR FORCE BASE FLORIDA**

SR 85 and 77<sup>th</sup> Special Forces Way West McWhorter Rd Overpass Environmental Assessment

> RCS 09-620 Final 4 June 2010



### Based on:

 $7^{\text{th}}$  Special Forces Group Complex Overpass Traffic Study, USACE June 2009

Eglin BRAC Program 2005 EIS (ROD Feb 2009)

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**Report Documentation Page** 

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# FINDING OF NO SIGNIFICANT IMPACT FOR CONSTRUCTION OF SR 85/77 SPECIAL FORCES WAY-WEST MCWHORTER ROAD OVERPASS EGLIN AIR FORCE BASE RESERVATION, FLORIDA RCS 09-620

Pursuant to the Council on Environmental Quality's regulations for implementing procedural provisions of the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] 1500-1508), 32 CFR Part 989 and Department of Defense (DoD) Directive 6050.1, the U.S. Air Force (USAF) conducted an Environmental Assessment to identify potential effects associated with the construction of an overpass on State Road (SR) 85 at the newly designated 77 Special Forces Way-West McWhorter Road intersection. The Environmental Assessment (EA) is incorporated by reference.

### INTRODUCTION

The 2005 BRAC Environmental Impact Statement (EIS) for the beddown of the 7th Special Forces Group (7 SFG) on the Eglin reservation included mitigation to the increased traffic on SR 85. The United States Army Corps of Engineers (USACE) contracted a study to determine the best type of interchange to meet current and projected traffic needs. (EA Section 1.2, page 14)

### PURPOSE AND NEED FOR THE PROPOSED ACTION

The growth of SR 85 as a civil traffic route plus military uses degraded the traffic flow significantly. Florida Department of Transportation (FDOT) rated the current interchange at "F" for failing to maintain a safe and effective flow of traffic. Traffic growth is projected to overwhelm the current signalized interchange with the arrival of the 7 SFG in 2011. FDOT proposed an upgrade of the highway system to improve traffic flow through the critical hurricane evacuation routes that cross the Eglin AFB Reservation including SR 85. (EA Section 1.0, pages 14-15)

#### DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

FDOT, in cooperation with the DoD as part of the BRAC process, agreed to improve the SR 85 interchange to enhance access into Duke Field and the new 7 SFG compound. The primary beneficiary will be the USAF and US Army. A study was conducted to determine the best design by mathematical model of traffic flows projected through 2030. Five models were studied. The new traffic light (signalized interchange) was evaluated as a baseline/no action alternative and found to fail the needs for traffic flow and safety. Four interchanges with an overhead bridge were studied for safety, flow and cost. The designs differed in total acreage, which required driving cost and increased impact. The basic diamond interchange was found to be sufficient to meet traffic and safety, use the minimum land area, and be the most economical



to construct. The Diamond Interchange Overpass therefore meets the objectives of the proposed action. (EA Section 2.0, pages 20-30)

### ACTIONS CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

A partial cloverleaf interchange (alternative B), a single point urban interchange (alternative C), and a diamond interchange with semi-directional connection (alternative D) were identified and evaluated in the USACE study. All five options (including the no action and alternative A-conventional diamond interchange) were evaluated in a matrix (EA Section 2.4, pages 28-29) that included storm water pond area requirements; right of way areas; utility easement impacts; utility right-of-way impacts; level of service; performance; difficulty to construct; cost and all of the affected environmental components.

# ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION (DIAMOND INTERCHANGE OVERPASS)

The EA is incorporated by reference and covers the following in detail.

ACOUSTIC. Construction will generate two years of increased noise from heavy equipment. The operational life of the overpass will reduce noise relative to the current signalized interchange. The intersection is in a high noise area as aircraft operations, Army live fire, Navy Explosive Ordnance training, and 46 TW range activities all generate explosive noise, sonic booms, and jet noise. The overpass is not anticipated to significantly add to the overall noise. (EA Section 3.9, page 40)

AIR. Air Quality studies of traffic clearly demonstrate that stopped traffic at a signalized interchange increases localized air pollution. Vehicles obtain the greatest efficiency when moving at highway speeds. The proposed overpass will allow for unimpeded north/south traffic (over 90 percent of the projected daily traffic). Construction dust will be addressed by wetting and other controls. The long-term air quality impact is positive. (EA Section 3.2.1, pages 31-33)

BIOLOGICAL. The area around the interchange is known to potentially host several threatened or endangered (T&E) species. As the scope of the project is limited to existing crossroads, the impacts are limited to the habitat loss with the expansion of the area for the on/off ramps. The proposed alternative will impact 10-15 acres of trees at the edge of the existing highway, the least of all the alternatives studied. No T&E species were found in this area. A biological survey was completed and a finding of no impact was filed with the US Fish and Wildlife, who concurred on 1 Dec 09. (EA Section 3.3, pages 33-34 and Appendix K, pages 113-119)

CULTURAL RESOURCES. The project was reviewed according to Section 106 of National Historical Preservation Act. Previous surveys in 2006 and 2007 did not locate historic properties (as defined under 36 CFR§800.16. Florida State Historic Preservation Officer

- Committee of the Comm

(SHPO) concurrence is documented in the EA. According to a 2003 Programmatic Agreement (PA) among the Air Armament Center, Eglin AFB; the Advisory Council on Historic Preservation, and the Florida SHPO, regarding the Preservation and Protection of Historical and Archaeological Resources located at Eglin Air Force Base, Florida, in Section 5 under exempted actions, indicates SHPO consultation is not required when there are no historic properties present. This PA is considered applicable to this SR 85 project's planning under Section 106 requirements. Subsequent to the 2003 PA, Eglin AFB routinely consults five federally recognized tribes regarding compliance with Section 106 and NEPA. Consultation with tribes is considered complete regarding compliance with Section 106. Post-review discoveries of historic properties are considered unlikely to occur but if such inadvertent discoveries occur during implementation of the proposed undertaking, procedures of Eglin AFB's Integrated Cultural Resources Management Plan will be followed in association with 36 CFR§800.13 and other applicable authorities. (EA Section 3.12, page 46, Section 4.2.11, page 66 and Appendix C, pages 71-78)

**GEOLOGICAL RESOURCES.** The area is sand hills typical of the panhandle/gulf coast. The construction on a sand base will require pilings to achieve stability for the bridge. There are no known sinkholes in the area. The construction of ponds to control storm water is not anticipated to cause or contribute to negative geologic consequences. No significant impact is anticipated. **(EA Section 3.15, pages 48-49)** 

HAZARDOUS MATERIALS AND WASTE. Construction activities utilize materials that can generate characteristic hazardous waste. Sealants, adhesives, paint, lubricants, and fuels will all be utilized in the construction phase. All materials and waste will be monitored for proper use and disposal. No on-site disposal is permitted. Long-term construction and maintenance will add no significant hazardous pollutants. (EA Section 3.16, page 49)

SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE. The remote location of the project excludes all direct population impacts. Economic impacts will be positive during the construction phase. (EA Section 3.18, pages 49-50 and Section 3.13, page 47)

**TRAFFIC.** The construction phase of the project will present some sporadic challenges to traffic as lanes are restricted. Overall, the impact is expected to be positive in restoring traffic flow and reducing accident potential. (EA Section 3.6, page 38)

**UTILITIES AND INFRASTRUCTURE.** Utilities will not be significantly impacted by this project. The substation located near the project will require increased protection and security as overall traffic is expected to increase under all alternatives. (**EA Section 3.7, page 38**)

WATER RESOURCES: Wetlands do exist within the area of concern. Survey and design will avoid impacts to the wetland, streams and drainages. There is no floodplain at this site to contend with. Ground water is not impacted. Storm water will be captured in detention ponds and released slowly as to not create a burden on drainages. Because the ponds will completely

drain in a few days and not create any new wetlands, bird/wildlife air strike hazard is not increased. No significant water impacts are anticipated. (EA Section 3.8, page 39 and Section 3.17, pages 49-50)

**CUMULATIVE EFFECTS:** The additional cumulative impact of replacing a signalized interchange with an overpass is essentially equal. The expansion of reflective surfaces is offset by the controls mandated by Florida Department of Environmental Protection to build detention ponds. **(EA Section 4.3, pages 66-67)** 

### PUBLIC REVIEW

A public notice was published in the *Okaloosa Daily News* on 4 Dec 09. Copies of the Draft EA and Draft Finding of No Significant Impact were made available for public review and comment at the Crestview Public Library, Fort Walton Beach Public Library, and Navarre Public Library from 4 Dec 09 - 20 Jan 10. No comments were received. A second 15-day public review period was held 22 Mar - 5 Apr 10 to disclose completion of the draft EA and selection of the preferred alternative. This notice was published in the *Northwest Florida Daily News* on 22 Mar 10 with copies of the document available at the same libraries stated above. No comments were received during this timeframe.

#### FINDING OF NO SIGNIFICANT IMPACT

After reviewing the EA prepared in accordance with the requirements of the NEPA, the Council on Environmental Quality regulations, the USAF Environmental Impact Analysis Process, 32 CFR Part 989 as amended, and receipt of public comments on the document, I have determined the Proposed Action, the Diamond Interchange Overpass, would not have a significant impact on the quality of the human environment and therefore an EIS does not need to be prepared. This decision was made after taking into account all submitted information and considering a full range of practical alternatives that would meet the project requirements. This analysis fulfills the requirements of NEPA, the President's Council on Environmental Quality, and 32 CFR Part 989.

DAVID W. FUNK, Colonel, USAF

Command Civil Engineer

Installations and Mission Support

Date: 18 FUN 10



# NOTICE OF ADOPTION and FINDING OF NO SIGNIFICANT IMPACT

FHWA-EFLHD Project Number R-AD-SR 85(1)

Construction of Florida Route 85/77 Special Forces Way-West McWhorter Road Interchange

Eglin Air Force Base Reservation, Okaloosa County, Florida

### INTRODUCTION

The Eastern Federal Lands Highway Division of the Federal Highway Administration (FHWA) in cooperation with the Florida Department of Transportation (FDOT) and the United States Air Force (Air Force) proposes to construct a grade separated interchange to replace the existing atgrade intersection of Florida State Route (SR) 85 and 77 Special Forces Way – McWhorter Road, located on Eglin Air Force Base (AFB) in Okaloosa County, Florida. The project includes construction of a bridge across SR 85, access ramps, paving, drainage, storm water management facilities and related site/utility work.

The Air Force recently prepared an Environmental Assessment (EA) in which five alternatives were analyzed: the No Action Alternative and four grade separated alternatives listed as Alternatives A through D. The Air Force's EA (attached) was prepared pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (40 CFR 1500 et seq.), 32 CFR Part 989 and the Department of Defense Directive 6050. The Finding of No Significant Impact (FONSI) signed by the Air Force on June 18, 2010 (attached) documented the selection of Alternative A, Diamond Interchange Overpass as the selected alternative.

The FHWA was a cooperating agency on the Air Force EA, it also reviewed and commented on the EA before it was finalized. The FHWA adopted the Air Force EA and issued its own FONSI signed on February 2, 2011. As the design of the project progressed, it was determined that it is necessary for Range Road (RR) 213 to remain as an at grade road in order to accommodate heavy and/or oversized loads. The alternative selected in the February 2, 2011 FONSI, the Diamond Interchange Overpass, would require that the grade of RR 213 be raised at the northbound off ramp and southbound on ramp. Therefore, it was necessary to revise the design of the interchange. The Air Force determined that the revised interchange design qualified for a Categorical Exclusion because it was covered under the originally completed EA. The Categorical Exclusion was documented in an Air Force Form 813 per 32 CFR 989 that was signed on May 26, 2011.

### SELECTED ALTERNATIVE

A modified version of Alternative B – Partial Cloverleaf is the Selected Alternative. Alternative B, as describe in the EA, would include one loop ramp in the southeast quadrant. The Selected Alternative includes an additional loop ramp in the southwest quadrant. The Selected Alternative meets traffic and safety requirements, and is also more economical to construct. Although Alternative B has a slightly wider footprint, the ramps will all be located to the south of the intersection and overall utilize a smaller footprint. The selected alternative meets the traffic mitigation purpose and need as outlined in the Base Closure and Realignment Commission (BRAC) 2005 Environmental Impact Statement for the increase in Eglin AFB missions as well as FDOT's functional requirements for SR 85.

### OTHER ALTERNATIVES CONSIDERED

In addition to the No Action Alternative and the Selected Alternative - Alternatives A, C and D were also considered. These alternatives were respectively, Conventional Diamond Interchange (A), Single Point Urban Interchange (C) and Diamond Interchange with Semi-directional Connection. These alternatives (A, C and D) had a greater impact to the natural environment, were more expensive to construct and would utilize more land area than the Selected Alternative.

### PUBLIC INVOLVEMENT

Public notice of the proposed action and availability of the draft Air Force EA was published in the Okaloosa Daily News on December 4, 2009. Copies of the draft EA and draft FONSI were made available for public review and comment at the Crestview Public Library, Fort Walton Beach Public Library and the Navarre Public Library from December 4, 2009 to January 20, 2010. No comments were received. A second 15 day public review period was noticed and held from March 22, 2010 to April 5, 2010 to inform the public that the EA was complete and selection by the Air Force of a preferred alternative. Notice for the second public comment period was published in the Northwest Florida Daily News on March 22, 2010 with copies of the documents available at the public libraries previously listed. No comments were received during the second public comment period.

The modifications to the design of the interchange were Categorically Excluded by the Air Force; therefore, no additional public involvement was required.

### AGENCY COORDINATION

Eglin AFB contacted the five federally recognized tribes affiliated with Eglin AFB regarding the proposed project. None of the tribes had a concern regarding the project.

The US Fish and Wildlife Service (USFWS) was contacted regarding federally listed species possibly impacted by the proposed project. The USFWS concurred (December 3, 2009) with Eglin AFB's determination that there would be no effect to federally listed species by the proposed action.

The Florida Department of State, Division of Historical Resources concurred (February 15, 2007) with Eglin AFB's determination that the project will have no effect on cultural resources listed or eligible for listing in the National Register of Historic Places.

The Florida Department of Environmental Protection concurred (January 8, 2010) with Eglin AFB's Coastal Zone Management Act determination.

The following agencies also participated in the project review or were provided an opportunity to comment:

US Army Corps of Engineers
Florida Department of Transportation
Florida State Clearinghouse
Northwest Florida Water Management District
Florida Department of Environmental Protection
West Florida Regional Planning Council
Okaloosa County, Florida

The Air Force determined that the modifications to the interchange would have no effect to any federally-listed species or cultural resources in the Air Force Form 813 that was signed on May 26, 2011. The interchange, as modified (Selected Action), continues to be consistent with the Florida Coastal Management Program.

### MITIGATION AND CONSTRUCTION REQUIREMENTS

The following commitments and mitigations were included and committed to by the Air Force in its EA. The FHWA commits to implement these as part of its project requirements.

### Air Quality

- Impacts will be minimized by adherence to all state and local regulations and to the FDOT *Standard Specifications for Road and Bridge Construction*.
- Reasonable precautions will be taken to minimize fugitive particulate emissions during ground-disturbing/construction activities in accordance with the FHWA FP-03 (standard construction specifications).

### **Biological Resources**

- Conduct surveys for gopher tortoises in accordance with the Florida Fish and Wildlife Commission (FWC) Gopher Tortoise Management Plan (adopted in 2007) and current Gopher Tortoise Permitting Guidelines.
  - A gopher tortoise survey is required by a certified biologist at least one month prior to any ground disturbance.
- As a result of the surveys, if active burrows are found within 25-feet of the Proposed Action, the following management actions will be implemented:
- Coordinate with and provide the FWC a completed gopher tortoise relocation permit application in accordance with the approved FWC Gopher Tortoise Management Plan (adopted in 2007) and current Gopher Tortoise Permitting Guidelines.
- All staging and storage areas will be sited to avoid impacts to gopher tortoise burrows and habitats.
- Coordinate with the FWC staff, in addition to Eglin Natural Resources Section and USFWS staff, during design to address wildlife crossings.
- Verify red-cockaded woodpecker survey.

### **Cultural Resources**

- All cultural resource work (pre-construction survey and any artifact recovery) will be conducted according to Eglin AFB and Section 106 guidelines.
- The FHWA will coordinate with the Air Force's 96 Civil Engineering Group/Cultural Resources Branch (CEG/CEVH) for consultation and mitigation regarding any unanticipated discoveries during construction. Requirements, modifications and coordination for addressing unanticipated discoveries will be resolved jointly by FHWA and the Air Force and if applicable the Florida State Historic Preservation Office.
- Work will not begin until all necessary consultations are complete.
- All agencies and contractors will coordinate with the 96 CEG/CEVH Environmental Management Division Chief, who can be reached by phone at (850) 882-8459, on any change in plans.
- Archaeological surveys in areas considered high probability by Eglin Cultural Resource Branch and will mitigate for site impacts by avoidance of resources and data recovery where eligible resources will be impacted by the project. The site has been cleared for construction by the State Historic Preservation Office (see letters).

### **Hazardous Materials**

- Contact the 96 CEG/CEVR (Restoration Branch) if unusual soil coloration and/or odors are detected or if small arms debris is found.
- Hazardous Material is to be present only in quantity necessary for the task requiring it (no excess) and used as directed to minimize the creation of waste.
- Any hazardous wastes (e.g., waste adhesives and paint wastes) generated during construction will be handled by the contractor in accordance with applicable federal and state laws and regulations.
- Any and all unexploded ordnance (UXO) hazards are "cleared" prior to the commencement of construction activities.

### **Noise and Aesthetics**

- Establish landscape, terrain and a vegetated buffer to provide aesthetic value and possible noise attenuation.
- Do not add wetland, invasive or non-native species.
- Do not create attractive habitat for undesired species.

### Soils and Erosion

- Where applicable, rough grade slopes or use terrace slopes to reduce erosion.
- The Air Force requires inspection and maintenance of best management practices (BMPs) under the stormwater construction general permit.

#### Utilities

Coordinate and obtain all applicable permits, easements, and/or authorizations prior to
the commencement of construction activities that may affect utilities service. Those
utilities include, but are not limited to Okaloosa County, Chelco, PowerSouth (formerly
Alabama Electric Co-op), Gulf Power, Embarq, Cox Communications, Verizon (formerly
MCI), Eglin AFB, Niceville Valpariso Okaloosa County Regional Waste Water, and
Okaloosa County Gas District.

### Water Resources

- Permits and site plan designs will include site-specific management requirements for erosion and sediment control.
- Designation of staging and storage areas for use of construction equipment.
- Entrenched silt fencing and staked hay bales or other approved alternate controls to be installed and maintained along the perimeter during construction and staging and storage areas.
- Inspection of silt fencing on a weekly basis and after rain events. Replace fencing as needed.
- Stockpiles would be removed in a timely manner.
- Waste receptacles, including dumpsters, would be covered to prevent rainwater and wildlife from entering. (Note: bears are known to live here).
- Inclusion of stormwater features designed to control runoff associated with the additional impervious surface, land clearing, grading, and excavating.
- For water quality protection, erosion control blankets/fabric and other applicable BMPs would be incorporated to reduce soil erosion and prevent sedimentation from entering surface waters, floodplains, and wetlands.
- Storage of chemicals, cements, solvents, paints, or other potential water pollutants in locations where they cannot cause runoff pollution into surface waters, floodplains, and wetlands.

### Wetlands

Wetlands are present near the project site. No construction is projected at this time that
will have any direct impact on the wetland however under the project design wetlands
must be delineated. To the maximum extent possible, avoid and minimize direct and

- indirect disturbance of wetlands through roadway design and innovative construction techniques.
- Develop a mitigation plan to satisfy the requirements of the United States Army Corps of Engineers and Northwest Florida Water Management District/Florida Department of Environmental Protection.
- Direct wetland impacts are by permit only. No direct wetland impacts are anticipated.
- Do not create artificial wetlands near airfields (see Air Force EA Appendix L, below). Storm water ponds must drain within a few days to prevent the growth of wetlands vegetation and to avoid attracting birds and wildlife.

# APPENDIX L: Federal Aviation Administration (FAA) Bird Aircraft Strike Hazard (BASH) Advisor Circular (Air Force EA Appendix L)

United States Department of Agriculture Wildlife Services BASH team at Eglin/Duke recommends against any retention facilities that have standing water more than 48 hours and supports the following FAA Advisory Circular quoted in part:

Hazardous Wildlife Attractants on or Near Airports, 8/28/2007, AC No: 150/5200-33B
Pg 1 paragraph 1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING
AIRSPACE. For all airports, the FAA recommends a distance of 5 statute miles between the
farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could
cause hazardous wildlife movement into or across the approach or departure airspace.

Pg 5 paragraph 2-3 section b. NEW STORM WATER MANAGEMENT FACILITIES. The FAA strongly recommends that off-airport storm water management systems located within the separations identified in Sections 1-2 through 1-4 be designed and operated so as not to create aboveground standing water. Storm water detention ponds should be designed, engineered, constructed and maintained for a maximum 48-hour detention period after the design storm and remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steepsided, rip-rap lined, narrow, linearly shaped water detention basins. When it is not possible to place these ponds away from an airport's AOA, airport operators should use physical barriers, such as bird balls, wires grids, pillows, or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

Pg 7-8 paragraph 2-4. WETLANDS. Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species.

a. Existing wetlands on or near airport property. If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends

immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports. Where required, a Wildlife Hazard Management Plan (WHMP) will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist. c. Mitigation for wetland impacts from airport projects. Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4. (1) Onsite mitigation of wetland functions. The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge, which cannot be replicated when moved to a different location. Using existing airport property is sometimes the only feasible way to achieve the mitigation ratios mandated in regulatory orders and/or settlement agreements with the resource agencies. Conservation easements are an additional means of providing mitigation for project impacts. Typically the airport operator continues to own the property, and an easement is created stipulating that the property will be maintained as habitat for state or Federally listed species. Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations. A wildlife damage management biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Sections 1-2 through 1-4 before the mitigation is implemented, A WHMP should be developed to reduce the wildlife hazards.

Above quoted sections are all from the FAA Advisory Circular. (Hazardous Wildlife Attractants on or Near Airports, 8/28/2007, AC No: 150/5200-33B)

### CONCLUSIONS

The FHWA has determined that the Selected Alternative will not have a significant impact on the human or natural environment. The Selected Alternative does not constitute an action that requires preparation of an environmental impact statement (EIS). Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in, or eligible for, listing in the National Register of Historic Places, or other unique or unknown risks, significant cumulative effects, or elements of precedence were identified.

The FHWA finds it is in the public interest to adopt the Air Force EA and utilize it to support FHWA's determination and issuance of a FONSI to meet its NEPA requirements. The FHWA has reviewed the Air Force EA and Air Force Form 813 and determined that the document meets

its requirements for an EA as set forth in 40 CFR 1500 to 1508, 23 CFR 771.119 and 771.121, and related environmental laws, executive orders and implementing regulations. Based on this review, the FHWA hereby adopts the Air Force EA and issues it own FONSI indicating that the proposed project will result in no significant impacts and that preparation of an EIS is not required.

Reviewed for Legal Consistency:

Milton Hsieh, Legal Counsel Federal Highway Administration

Eastern Federal Lands Highway Division

12/19/11

Recommended for Approval:

Jack Van Dop, Technical Specialist-Environment

Federal Highway Administration

Eastern Federal Lands Highway Division

12-19-11

Date

Approved:

Karen A. Schmidt, Director, Program Administration

Federal Highway Administration

Eastern Federal Lands Highway Division

20 DEC 2011

Date

# **Executive Summary**

The 2005 Defense Base Closure and Realignment Commission (BRAC) actions to add the US Army 7<sup>th</sup> Special Forces Group (7 SFG) to the north central area of Eglin AFB along with other increases in troop strength throughout the cantonment area are expected to strain the already busy SR 85 road between Eglin AFB main (cantonment) and Crestview, Florida. It was recognized in the Eglin AFB 2005 BRAC EIS that the intersection at the new 7 SFG and Duke Field would be a problem. A traffic signal was recommended as an interim mitigation in the EIS and subsequently installed (completed in Sept 2009). A full traffic study by the United States Army Corps of Engineers (USACE) was concluded in June 2009 clearly stating the traffic signal was not an acceptable solution to the type and volume of traffic flow at this intersection as defined by Florida Department of Transportation (FDOT) standards. As traffic is expected to continue to increase at the Florida average historic rate of 3% annually, plus increases due to BRAC impacts, the interchange will face increasing challenges. Additionally, the USACE and FDOT recognize this as a critical corridor for evacuation and general access on the north/south axis through Eglin. As such, it is designated as a road for unimpeded travel and high flow rate. A traffic stop reduces overall flow and adds a hazard.

The USACE study examined alternatives from the traffic safety, flow, and cost perspective. Five engineering options were examined. The study gives a strong recommendation for the construction of a "Conventional Diamond Interchange". This type of intersection will allow for unimpeded north and south bound travel while allowing safe acceleration/deceleration for Duke Field and 7<sup>th</sup> Special Forces bound traffic to exit and enter.

Key items of consideration are the no action alternative, the proposed alternative and modifications of the traffic study alternatives as identified in this EA. The traffic study advocates the building of an overpass and discusses the four main types. The study makes it very clear that the mathematical model clearly prefers the diamond overpass configuration as it is the simplest construction that also meets the traffic need. The study is heavily weighted with mathematical models and tables to uphold their final recommendation to build an overpass in the diamond configuration. The study does not address any environmental issues outside of the traffic study and population trends.

It is the purpose of this Environmental Assessment to therefore evaluate the logic of this preferred alternative and discarded alternatives, examine the current situation (no action) and present any environmental limits or actions needed to be considered by the proponent.

The decision to be made by the proponent (Air Force) is:

- 1) To take no action at this time.
- Accept the USACE/FDOT proposed diamond overpass as studied and agree to grant the additional easements needed.
- 3) Opt for one of the other interchange designs and appropriate easement.

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# **Table of Acronyms**

7 SFG
7th Special Forces Group
77SFW
77th Special Forces Way
96 CEG
96th Civil Engineer Group

96 CEG/CEV
 96th Civil Engineer Group Environmental Management Div
 96 CEG/CEVCE
 96th Civil Engineer Group Environmental Engineering Section

96 CEG/CEVSH
 96th Civil Engineer Group Cultural Resources Branch
 96 CEG/CEVSN
 96th Civil Engineer Group Eglin Natural Resources Section

**96 CEG/CEVSNW** 96th Civil Engineer Group Wildlife Section

**96 CEG/CEVSP** 96th Civil Engineer Group Environmental Analysis Section

AAC Air Armament Center

AADT Average Annual Daily Traffic

ac acre(s)

AF Air Force

AFB Air Force Base

AFI Air Force Instruction

AOC Area of Concern

BASH Bird/Wildlife Air Strike Hazard
BMP Best Management Practice

**BRAC** Defense Base Closure and Realignment Commission

CEQ Council on Environmental Quality
CFR Code of Federal Regulations

CO Carbon Monoxide

CZMA Coastal Zone Management Act
EA Environmental Assessment

**EO** Executive Order

**ERP** Environmental Restoration Program

**ESA** Endangered Species Act

FAC Federal Aviation Administration
FAC Florida Administrative Code

FDEP Florida Department of Environmental Protection

**FDM** Florida Development Manual

**FDOT** Florida Department of Transportation **FHWA** Federal Highway Administration

FS Florida Statutes
ft foot/feet
FY Fiscal Year

GIS Geographic Information System

HAP Hazardous Air Pollutant
 HCS Highway Capacity Software
 HCM Highway Capacity Manual
 IWR Impaired Waters Rule

ITE Institute of Transportation Engineers

**LOS** Level of Service

μg/m³ Micrograms per cubic meter

**mph** Miles per Hour

MPO Metropolitan Planning Organization
NAAQS National Ambient Air Quality Standards

NEI National Emissions Inventory
NEPA National Environmental Policy Act

NO<sub>2</sub> Nitrogen Dioxide

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

O<sub>3</sub> Ozone Pb Lead

PM Particulate Matter
PPM Parts Per Million

**RCRA** Resource Conservation and Recovery Act

RCW Red-cockaded Woodpecker

**ROI** Region of Influence

SFG US ARMY 7<sup>th</sup> Special Forces Group

SFW 77<sup>th</sup> Special Forces Way
SIP State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide SR State Road

**SWPPP** Stormwater Pollution Prevention Plan **TPO** Transportation Planning Organization

**U.S.** United States

**U.S.C.** United States Code

**USACE** U.S. Army Corps of Engineers

**USEPA** U.S. Environmental Protection Agency

**USFWS** U.S. Fish and Wildlife Service

**UXO** Unexploded Ordnance

WHMP Wildlife Hazard Management Plan

**Yr** Year



Figure 1 MAP: Florida with intersection location



Figure 2 MAP: NW Florida.

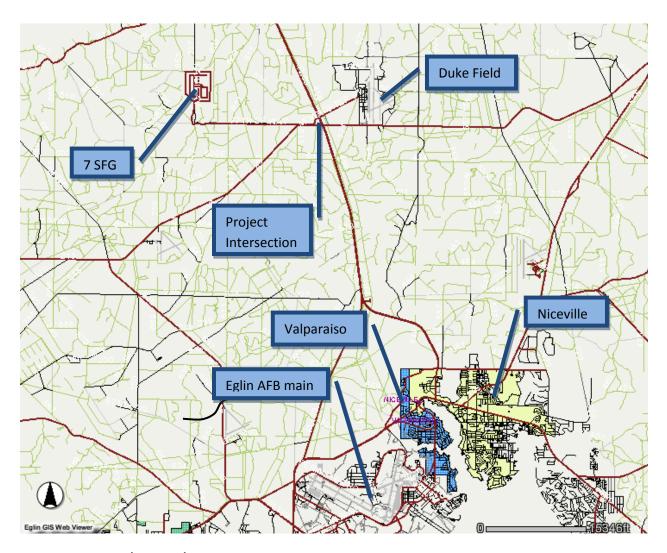


Figure 3 MAP: Eglin/Niceville/Valparaiso

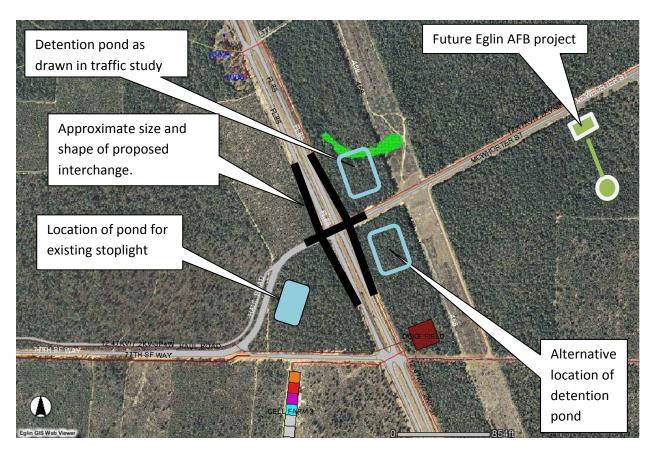
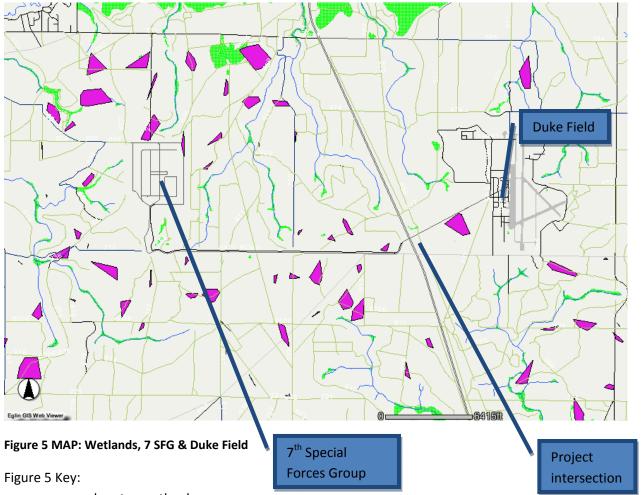


Figure 4 MAP: Model of diamond interchange on location



- green denotes wetlands
- red is Red Cockaded Woodpecker colonies
- drainages are blue

# 1.0 Purpose & Need for Action

# 1.1 Proposed Action

The United States Air Force proposes to build a more effective traffic control at the intersection of State Road (SR) 85 and 77<sup>th</sup> Special Forces Way-McWhorter Road (SR 85/77 SFW). The construction of a signalized interchange was complete and operational, September 8, 2009, as outlined in the Eglin BRAC Program 2005 EIS Record of Decision signed Feb 2009. The improvement of the intersection is intended to address the increased impacts of public traffic along the SR 85 corridor and the military traffic to the 7<sup>th</sup> Special Forces and Duke Field as outlined in the BRAC EIS 2005 mitigations to traffic impacts. The proposed action is to occur completely on federal lands controlled by Eglin AFB. SR 85 is an easement through Eglin AFB, not Federal Highway Administration (FHWA) or Florida Department of Transportation) FDOT property. The project is a traffic mitigation action as outlined in the BRAC 2005 EIS for the increases in Eglin AFB missions.

### 1.2 Need for the Action

Traffic at SR 85/77 SFW has and will continue to grow. USACE (consultant; Greenhorn & O'Mara) completed a study of this intersection. Given the incoming mission of US Army 7th Special Forces Group (7 SFG), increased uses of Duke Field and in conjunction with Florida civil population growth trends determined the proposed traffic signal is inadequate for traffic flow. It is therefore rated at a Level of Service (LOS) rating of "F" reflecting traffic delays and reduced traffic flow rates below the desired 65 mph optimum. FDOT service level standards were used for the study.

As this is a major north-south traffic artery and one of 3 hurricane evacuation routes for the greater Ft Walton Beach area, it is necessary to maintain a continuous flow of traffic for efficient movement along the artery.

# 1.2.1 USAF/ARMY Design Requirements Unique to the intersection

As Eglin has military missions of a sensitive nature, specific requirements are identified that are to be evaluated for environmental impact.

Lighting and lighted traffic signals – military operations utilizing night vision enhancement (goggles) is scheduled in this training area. Lighting is requested to be shielded or directed to prevent upward lighting and of the minimum safe illumination level. Muting or shutting down lighting when not needed (sensor driven lighting) would be desirable.

Secure movement - The 7<sup>th</sup> SFG has requested the overpass be shielded visually from underpass traffic to help aid in maintaining the minimum exposure for operational security.

Oversize Objects – the 46TW has a requirement to move large (cargo aircraft) and heavy (battle tanks and naval craft) objects on RR 215 (now 77<sup>th</sup> SFW). Any signs, posts, fences or other obstructions should have a method of easy removal or hinge. As some objects may be extremely heavy, the ramps and bridges will need to be able to bear the weight of a tractor-trailer and battle tank (75 tons plus the truck) or have provisions for bypassing the bridge. The retaining of the original RR 215 entrance may be desirable for such loads. Gating or other traffic control may become necessary.

Road closure – Periodically, the 46<sup>th</sup> Test Wing may require SR 85 to be closed south of the intersection for brief periods for safety. Lights, gates or a turn-around may be desired at the chosen location for traffic stoppage.

### 1.3 Objectives of the Action

The study by USACE was to determine the need for upgraded traffic control, examine the options and recommend an action. The action therefore is to examine the consequences of an improved intersection, widened right of way and detention pond.

# 1.4 Applicable Regulatory Requirements and coordination

Traffic and Safety as directed by FHWA and FDOT are the guiding regulatory requirements for the overall project. Environmental concerns to be addressed include Threatened and Endangered Species concerns by Eglin Natural Resources Section (NRS) and reviewed by the U.S. Fish and Wildlife Service (USFWS). A Coastal Zone Management Act (CZMA) determination request was reviewed by the Florida Department of Environmental Protection (FDEP) for consistency with respect to Florida's Coastal Management Plan (see Appendix for response letter dated January 8, 2010). The US Army is the tenant agency at the 7<sup>th</sup> Special Forces Group Complex. Army requirements will therefore also be considered. 46<sup>th</sup> Test Wing is the host organization for all range activities and is very interested in impacts to test range activity, any changes to traffic or access to test ranges. Florida Department of Environmental Protection (FDEP) concerns specifically dealing with water, erosion, air, and hazardous materials will be addressed.

Under the no action alternative, no new requirement is incurred.

Under all the alternatives the following requirements should be considered:

Stormwater: A stormwater facility design and construction permit in accordance with Chapter 62-346 Florida Administrative Code (FAC) (Rule 62-346) would be required. Coordination with 96CEG/CEVCE stormwater manager is required.

Air: The 96CEG/CEVCE air manager must be notified of the use of generators and other emission sources. Dust and fugitive emission control would be followed.

Drinking Water: Any modification to existing drinking water infrastructure or relocation of water lines should be in accordance with FAC Rules 62-555; 62-55.345 and 62-555.330. The permit application or FDEP Notification and Request for Clearance must be submitted to 96 CEG/CEVCE Drinking Water Manager for review and execution to FDEP.

Maintenance Rating Program (MRP): FDOT guide to construction for maintainability and safety.

Coastal Zone Management Act: See Appendix for CZMA consistency determination

Migratory Bird Treaty Act (MBTA): See Appendix for No Affects letter.

Federal Highway Administration (FHWA) Guide: Standards for road traffic and construction, safety, and signs.

Wetlands: Environmental Resource Permit (ERP) delineation of wetlands is required as part of the project design to avoid/minimize any impact or potential impact. FAC rule 62-346

No eligible cultural resources are located within the project area. Therefore SHPO consultation is not required as indicated under the exempted actions of section 5 of the Programmatic Agreement between the Air Armament Center, Advisory Council on Historic Preservation and Florida State Historic Preservation Officer regarding the Preservation and Protection of Historical and Archaeological Resources located at Eglin Air Force Base, Florida (2003). Tribes indicated to Eglin in an official meeting on September 2008 that they do not want to be informed of projects that do not impact resources.



View looking south west from McWhorter across the intersection toward 77 SFW. Note the new pavement marks the start of the improved intersection as outlined in the 2005 BRAC EIS

Figure 6 Photo: Intersection with traffic signal. September 2009

# 1.4.1 Related EIS/EA & other relevant documents

The Eglin BRAC 2005 EIS is the primary document of reference. 7<sup>th</sup> Special Forces Group Complex Overpass Traffic Study June 2009 is the USACE study that will be the reference document for traffic safety and related impacts. Other studies to be included by reference are:

General Plan, Eglin AFB and Duke Field, 96th Civil Engineer Group, Eglin AFB, Florida, November 2001

Environmental Restoration Program Management Action Plan, Headquarters, Air Armament Center (AAC), Eglin AFB, Florida, July 2003

Hazardous Waste Management Plan, AAC Plan 32-7006, Headquarters, AAC, Eglin AFB, Florida, June 2006

Hazardous Materials Management Plan, AAC Plan 32-9, Headquarters, AAC, Eglin AFB, Florida, February 2003

Okaloosa-Walton Long Range Transportation Plan (LRTP)

Integrated Cultural Resources Management Plan (ICRMP), Eglin AFB, 2006.

Integrated Natural Resources Management Plan (INRMP), Eglin Air Force Base 2000

Integrated Cultural Resources Management Plan Eglin AFB (ICRMP) 2006

# 1.5 Summary of Decisions to be made

### 1.5.1 Decisions to be made:

The proponent's choices on this project are as follows:

- Take no action and allow the continued use of the recently installed (fall of 2009) stop light to control traffic flow.
- Build the BRAC EIS mitigation overpass as recommended in the USACE traffic study, specifically option A (preferred alternative).
- Build one of the other more complex overpass configurations.
- The location, size and type of a storm water pond should be clearly decided as the topography, UXOs and an existing wetland should be weighed as potential issues.
- Whether the analysis in this EA justifies a Finding of Significant Impact or whether the preparation of an EIS will be required.

# 1.5.2 Cooperating Agencies:

Eastern Federal Lands Highway Division (U.S. Department of Transportation) formally agreed to a cooperating agency role by letter dated 8 January 2010 (appendix). Other agencies actively cooperating in the creation of this EA are the Florida Department of Transportation, Walton County Department of Public Works, Eglin Air Force Base and tenant units to include the 46 Test Group, 7 Special Forces, 6 Ranger Battalion and AF Special Operations Command.

# 1.6 The scope and bounds of the environmental analysis

This Environmental Assessment (EA) was prepared in accordance with the requirements of NEPA, the Council on Environmental Quality (CEQ) regulations of 1978, and Title 32 Code of

Federal Regulations (CFR) Part 989. 96 CEG/CEVSP's review of the AF Form 813s determined that the Environmental Impact Analysis Process Working Group should address the Proposed Action. The AF Form 813 control number for this project is RCS#09-620.

Analysis for this action to include the area of immediate and proposed construction would include the affected communities of Niceville, Crestview, Valparaiso and unincorporated Okaloosa County. No residential communities are directly impacted in the immediate area as the project is completely within the bounds of Eglin AFB. The environmental analysis is to cover the impacts of construction on traffic, tree removal, earth work, water issues, and known species impacts. The project would require 8 weeks of growing season following land disturbance to gain 70% ground cover sufficient to inhibit erosion. The time bound for direct construction impact is therefore at a minimum to be the construction phase plus 1 summer. Direct impacts of the growth of traffic in the SR 85 corridor are extensively examined in the traffic study.

As the project is driven wholly by the Defense Base Closure and Realignment Commission (BRAC), the cumulative analysis will reflect the actions of the BRAC. To avoid needless redundancy, discussions and decisions previously examined will be included by reference to the Eglin AFB BRAC Program 2005 EIS. This Environmental Assessment will therefore be a micro look at the immediate environmental effects of the traffic detour and construction of the bypass plus the recovery period following until vegetation is 70% re-established. The effects of the decision would be discussed in relation to other projects in the area, proposals for housing, improvements to Duke Field along the entrance road, 46<sup>th</sup> Test wing needs, and potential events that would have an impact such as road closures and hurricane evacuation.

# 1.6.1 Relevant Resources for study:

- Air
- Biology (species specific)
- Land Use
- Safety
  - o BASH
  - o UXO
- Traffic (transportation)
  - Lighting
- Utilities & Infrastructure
- Wetlands

### 1.6.2 Resources identified but not studied in detail:

- Acoustic (Noise)
- Biology (T&E species not present)
- Bounds Analysis

- Cultural Resources
- Environmental Justice and Child Safety
- Environmental Restoration Program
- Geology/Soils
- Hazardous Materials/Hazardous Waste
- Hydrology / Flood Plains
- Socioeconomic Issues

# 2 Alternatives including the Proposed Action

# 2.1 Chapter objective

This chapter is to explain the alternatives available for study and compare the alternatives in term of their impacts.

# 2.2 Description of alternatives

Note: the following is taken directly from the  $7^{th}$  Special Forces Group Complex – Overpass Traffic Study prepared by the USACE. Non-relevant sections were removed. All quoted material is in *italics*. The start or end of a quote with more text that is not included is designated by ... (3 periods). Clarifications added to this EA are in parenthesis and not italicized. Additional text is added where needed.

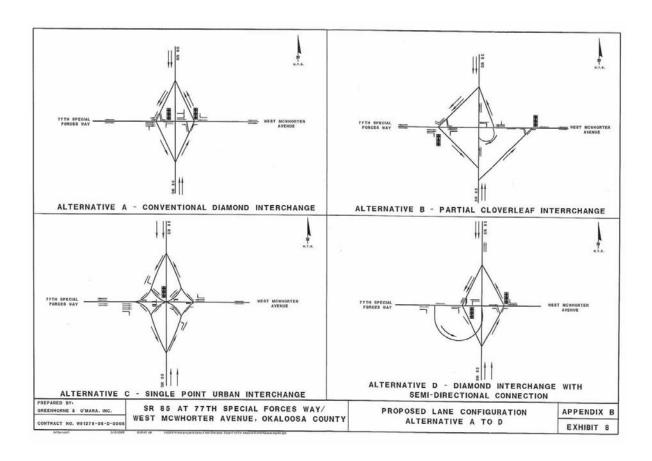
Greenhorne & O'Mara, Inc. (have) conducted a preliminary engineering analysis for four (4) interchange design configurations at the intersection of SR 85 and 77th Special Forces Way/ West McWhorter Avenue. The following at-grade signalized intersection and four interchange alternatives are documented in this initial screening report:

### Intersection (no action alternative)

- At-Grade Signalized Intersection (No-Build)

### **Interchange**

- Conventional Diamond Interchange (Alternative A) preferred alternative
- Partial Cloverleaf Interchange (Alternative B)
- Single Point Urban Interchange (Alternative C)
- Diamond Interchange with Semi-directional Connection (Alternative D)



Each Alternative accommodates future widening of SR 85. The widening can be accomplished in the median of SR 85.

# 2.2.1 At-Grade Signalized Intersection (No Action Alternative)

The Florida Department of Transportation (FDOT) has previously approved a temporary at grade signalized intersection with permitted left turns from both 77th Special Forces Way and West McWhorter Avenue. The No-Build alternative involves leaving the temporary signal (completed December 2009). Based on the previous study the signalized intersection would result in a level of service F when the base is fully occupied and would not meet FDOT level of service C standard. Therefore, this is not considered a long term solution or viable alternative. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

The signalized intersection on a 65 MPH corridor is incompatible with this highway speed as stopped traffic would experience a number of rear end collisions. Reducing highway speeds is an undesirable alternative, but it would be required at the approaches to the traffic signal.



Figure 7 MAP: Intersection as of September 2009



Figure 8 PHOTO: Traffic signal looking North on SR 85. Aug 2009

### 2.2.1.1 Past Actions of Relevance

The intersection prior to the introduction of the signalized interchange was a throughway with traffic stop signs on the Duke Field exit. RR 213 did not cross the highway at this point. BRAC mission changes at Eglin placed the 7 Special Forces Group and the F-35 both here. The development of a new compound for 7 SFG and the redevelopment of Duke Field required the upgrading of this intersection. The upgrade was a mitigation under the terms of the BRAC EIS however the form of the intersection was unknown and not studied as part of the EIS.

### 2.2.1.2 Present Actions of Relevance

TRAFFIC DATA - OPENING YEAR 2011

The existing year 2008 turning movement volumes were derived from the three-hour manual vehicle turning movement counts for the AM and PM peak hours conducted during the last week of February, 2008. The FDOT and the Okaloosa County five year work programs were assessed in order to identify any roadway improvements planned within the study area and the corresponding future committed trips were obtained. For opening year 2011 traffic on SR 85 and West McWhorter Avenue, the project trips and the obtained committed future trips were added to the existing turning movement volumes. For the opening year 2011 and design year 2020 traffic on 77th Special Forces Way, the total of trips to and from the 7th SFG Complex were calculated using the Institute of Transportation Engineers (ITE) Trip Generation Report (8th Edition, Volume 3 of 3) dated 2008, Military Base data plot and equation. The generated trips were distributed 65 percent to the north and 35 percent to the south at the intersection of 77th Special Forces Way/West McWhorter Avenue and SR 85. The trip generation and trip distribution methodology used in this project is consistent with the approved "Special Forces Group Complex Area 1 Traffic Study" dated 2008. Twenty military vehicles per hour were assumed to be moving between Duke Field and 7th SFG Complex. (7th Special Forces Group Complex – Overpass *Traffic Study* prepared by the USACE)

The report "7th Special Forces Group Complex Area 1 Traffic Study" dated 2008 presented the complete methodology for calculating opening year trips.

### 2.2.1.3 Reasonably Foreseeable Action

The ongoing changes under the BRAC EIS and EIS supplement should incur increased local population, new missions to include the F-35, 7 Special Forces Group, and other smaller changes as outlined in those documents. The building of this overpass is a direct result of a mitigation specified in that document. The overpass should have a positive effect on traffic flow. (EGLIN AFB 2005 BRAC PROGRAM EIS (FEB 2009).

F-35 specific changes should add back lost population from the closure of the 33<sup>rd</sup> Fighter Squadron. The F-35 would have a multi-national and multi-service training mission. Unlike the F-15 aircraft stationed here previously, the F-35 mission would require more operations, over more of the Eglin range. Multiple airfields would be utilized, with the exact fields yet to be determined. Under all F-35 training options, Duke Field should experience some sort of increase in use from F-35, C-130, or other Army aircraft. Duke Field should experience some sort of rebuild effort over the next decade as many structures are beyond their service life. While the projected plans show more use of the field, it doesn't necessarily reflect an increase in on site ground personnel. The precise future of Duke Field and the impact of the F-35 mission are still in flux. It is reasonable to foresee new traffic at this intersection, however the timing and amount is uncertain pending the final decisions on the F-35 mission.

### TRAFFIC DATA – DESIGN YEAR 2020

**SR 85:** The 2007 FDOT Traffic Information for SR 85 site number 0088 showed a 2.5 percent average increase in the Annual Average Daily Traffic from year 2008 to year 2016. Therefore the background traffic on SR 85 was assumed to contribute 1.5 percent towards the increase in AADT and the remaining one percent was assumed to be the natural growth. Therefore the traffic

on SR 85 was assumed to increase by one percent every year from the opening year of 2011 to the design year of 2020.

**Duke Field:** From opening year 2011 to design year 2020, a ten percent growth of traffic was assumed for the traffic coming in/out of the Duke Field complex as per the direction from USACE.

**7 SFG Complex:** For the design year 2020, the total number of employees at the 7th SFG Complex is expected to be 3,500. Traffic generation for the design year from the 7th SFG Complex was performed in the same way as the opening year 2011 using the Institute of Transportation Engineers (ITE) Trip Generation Report (8<sup>th</sup> Edition, Volume 3 of 3) dated 2008, Military Base data plot and equation. (7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

The outcome of the Supplemental BRAC EIS in 2011 may impact the level of activity at Duke Field as options under consideration may increase the activity there substantially.

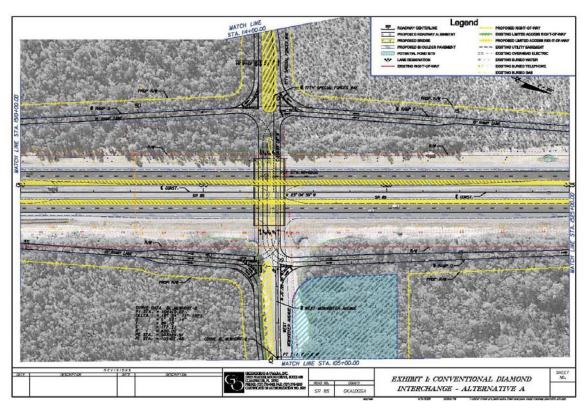


Figure 9 Alternative A: Diamond Interchange

# 2.2.2 Conventional Diamond Interchange (Alternative A - preferred)

The first interchange alternative assumes a conventional diamond interchange configuration to improve traffic flow conditions on SR 85 by creating free flow terminals on both sides with left turns at grade confined to the cross-roads. The diamond interchange has several advantages over a comparable partial cloverleaf: (1) all traffic can enter and leave the major road at relatively high speeds, (2) left turns require little travel distance and (3) a relatively narrow band of right-

of-way is needed. This interchange is the most common configuration. The only negative in selecting this option is the configuration ability to handle the heavy left turn movements. Because of the volume of left turn movements this alternative would probably require a signal to help moderate the West McWhorter Avenue and 77th Special Forces Way high left turn movements. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

## 2.2.3 Partial Cloverleaf Interchange (Alternative B)

The second alternative would include the geometric and operational improvements identified in Alternative A with the addition of an eastbound to northbound on-ramp (loop ramp) in the southeast quadrant of the interchange. The addition of the loop ramp would assist in eastbound (to northbound) left turn movements. The ramp would serve to reduce potential conflicts by providing free-flow conditions for the high eastbound left turn movement. The only disadvantages of a clover leaf are the additional travel distances for left-turning traffic. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

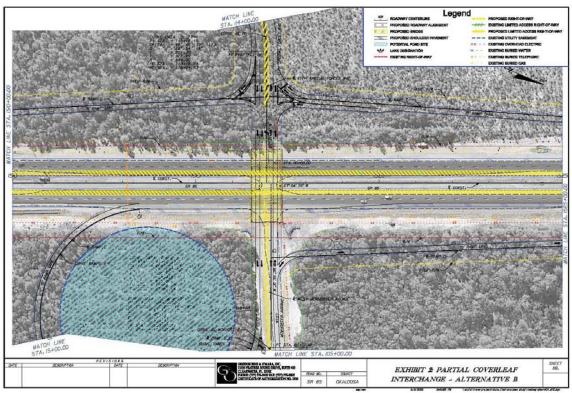


Figure 10 Alternative B: Partial Cloverleaf

# 2.2.4 Single Point Urban Interchange (Alternative C)

The third alternative assumes a single point urban interchange configuration to improve traffic flow conditions on SR 85 by featuring all four turning movements controlled by a single traffic signal with opposing left turns operating to the left of each other. The primary operational advantage in the configuration allows vehicles making opposing left turns to pass to the left of each other rather than to the right so their paths do not intersect. Also, the right-turn movements are typically free-flow movements and only the left turns must pass through to the left of each other which eliminates a traffic conflict reducing the signal operation from four phases to three.

The disadvantage of this configuration is the high construction cost associated with the bridges since the longer spans are needed because of the large intersection. Another disadvantage encountered is the length and geometry of the path for the left-turn vehicles through the intersections. The path of the left turning vehicles resembles a quarter of an ellipse which is a non-traditional path which may confuse the driver. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

NOTE: detention pond location as shown is to be evaluated for all alternatives.

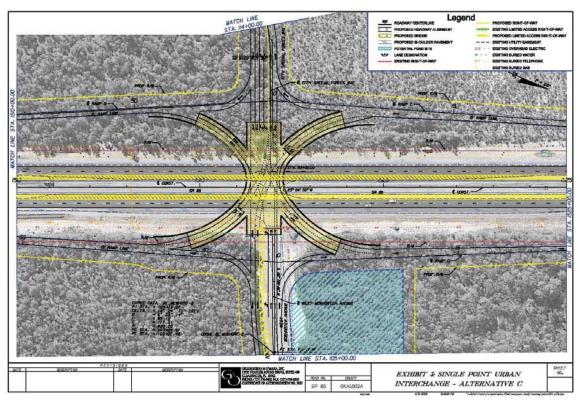


Figure 11 Alternative C: Single Point Urban Interchange

# 2.2.5 Diamond Interchange with Semi-directional Connection (Alternative D)

The fourth alternative is a diamond interchange with a semi-directional connection. The semi-directional connection would include the geometric and operational improvements identified in Alternative A with the addition of an eastbound to northbound on-ramp (slip ramp) in the southwest quadrant of the interchange. The advantages of the slip ramp would assist in eastbound (to northbound) left turn movements which would reduce the travel distance, increase the speed and capacity, eliminate weaving, and avoid the need for out of direction travel in driving a loop. The disadvantage of this configuration is additional bridge structures would be required. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

NOTE: The detention pond location as shown is to be evaluated for all alternatives. The area is partially the current location of the detention pond of the existing traffic signal interchange.

Alternative D moves the easements further into forested lands and potentially runs into UXO issues.

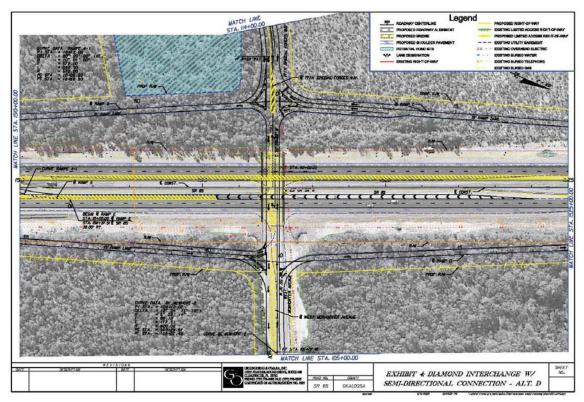


Figure 12 Alternative D: Diamond Interchange with Semi-Directional Connection

#### 2.3 Process Used to Generate Alternatives

TRAFFIC ANALYSIS (USACE)

The following four interchanges were considered at the intersection of SR 85 and 77th Special Forces Way/ West McWhorter Avenue for traffic analysis for the opening year and design year:

Conventional Diamond Interchange (Alternative A)

Partial Cloverleaf Interchange (Alternative B)

Single Point Urban Interchange (Alternative C)

Diamond Interchange with Semi-directional Connection (Alternative D)

Operational analyses for opening year and design year were performed for the signalized intersections where the on and off ramps from SR 85 meet 77th Special Forces Way/ West McWhorter Avenue using SYNCHRO 7© software. The on/off ramp analysis was performed using Highway Capacity Software (HCS) for both opening year and design year.

Sufficient lanes were provided for each individual movement for smoother movement of traffic and to avoid any queue back up in the opening year and the design year. The individual queue

lengths and required turning lane lengths are based on the design year SYNCHRO results. All of the signalized intersections are expected to operate at acceptable LOS both for the opening year and design year. (7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

#### 2.4 ALTERNATIVES COMPARISON

Evaluation criteria were developed and used to evaluate the potential impacts of the interchange alternatives. The evaluation matrix is in a chart format displaying the number and types of potential impacts for each alternative as well as preliminary estimate of probable cost for the project. The matrix is not intended to evaluate the alternatives against the at-grade signalized intersection, but only to compare the interchange alternatives with one another. The evaluation criteria in the matrix illustrates that the alternatives are consistent with the FDOT policies and FHWA requirements. The purpose of the preliminary evaluation of the alternatives is to determine which are viable for further consideration. (7th Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

NOTE: tables and design criteria from the study are not included in this report. The tables, formulation and other data in the study point conclusively to the choice of option A. The 7SFSG Complex –Overpass Traffic Study is available on request.

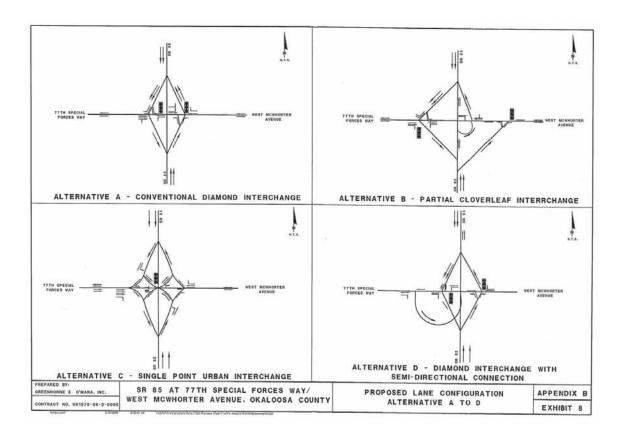
Table 1a Option comparison data from 7SFSG Complex -Overpass Traffic Study pg 9

|               | No Action* | A (Preferred) | В         | С            | D         |
|---------------|------------|---------------|-----------|--------------|-----------|
| Stormwater    | 0.8        | 1.85          | 2.17      | 2.14         | 2.24      |
| pond area     |            |               |           |              |           |
| (ac)          |            |               |           |              |           |
| Right of way  | 0.0        | 15.4          | 32.63     | 25.73        | 33.01     |
| area (ac)     |            |               |           |              |           |
| (additional)  |            |               |           |              |           |
| Utility       | none       | none          | yes       | none         | none      |
| easement      |            |               |           |              |           |
| impact        |            |               |           |              |           |
| Utilities     | no         | yes           | yes       | yes          | yes       |
| within the    |            |               |           |              |           |
| right of way  |            |               |           |              |           |
| Level of      | poor       | excellent     | good      | poor         | good      |
| Service       |            |               |           |              |           |
| performance   | poor       | good          | excellent | poor         | excellent |
| Difficulty to | low        | medium        | medium    | medium- high | high      |
| construct     |            |               |           |              |           |
| Cost (est)    | 2.5        | 16.5          | 22.4      | 17.8         | 18.5      |

<sup>\*</sup> completed Dec 2009

Table 2b Option comparison anent environmental issues

|                                  | No Action  | A (preferred)  | В  | С  | D   |
|----------------------------------|--|--|--|--|---|
| Air Quality                      | Stoplight<br>has<br>increased<br>vehicular<br>emissions                          | Reduces<br>vehicular<br>emissions<br>(less idling)   | Reduces<br>vehicular<br>emissions<br>(less idling)   | Reduces<br>vehicular<br>emissions<br>(less idling)   | Reduces<br>vehicular<br>emissions<br>(less idling)  |
| Habitat                          | 6.8 ac taken   | 17.25 ac taken   | 34.80 ac taken   | 27.87 ac taken   | 35.25 ac taken  |
| Land Use                         | 6.8 ac taken   | 17.25 ac taken   | 34.80 ac taken   | 27.87 ac taken   | 35.25 ac taken  |
| Safety                           | Stoplight has increased the potential for high speed rear- end collisions        | Will reduce<br>the potential<br>for high speed<br>rear-end<br>collisions at<br>stoplight and<br>may increase<br>high speed<br>animal<br>collisions | Will reduce<br>the potential<br>for high speed<br>rear-end<br>collisions at<br>stoplight and<br>may increase<br>high speed<br>animal<br>collisions | Will reduce<br>the potential<br>for high speed<br>rear-end<br>collisions at<br>stoplight and<br>may increase<br>high speed<br>animal<br>collisions | Will reduce the potential for high speed rear-end collisions at stoplight and may increase high speed animal collisions |
| BASH                             | Proper<br>design<br>minimizes<br>hazard  | Same as No<br>Action   | Same as No<br>Action   | Same as No<br>Action   | Same as No<br>Action  |
| UXO                              | Cleared  | Probable UXO contamination   | Possible UXO contamination   | Possible UXO contamination   | Possible UXO contamination  |
| Traffic                          | Heavy N/S<br>traffic<br>suffers<br>stoplight.<br>So does<br>light E/W<br>traffic | Heavy N/S<br>traffic would<br>flow freely.<br>E/W traffic<br>suffers 2<br>stoplights   | Heavy N/S<br>traffic flows<br>freely. E/W<br>traffic suffers<br>2 stoplights   | Heavy N/S<br>traffic flows<br>freely. E/W<br>traffic suffers<br>1 stoplight  | Heavy N/S<br>traffic flows<br>freely. E/W<br>traffic suffers<br>2 stoplights  |
| Lighting                         | Designed to minimize   | Same as No<br>Action   | Same as No<br>Action   | Same as No<br>Action   | Same as No<br>Action  |
| Utilities                        | No impact  | Utility lines<br>would have to<br>be relocated   | Utility lines would have to be relocated & substation may require relocation   | Utility lines<br>would have to<br>be relocated   | Utility lines<br>would have to<br>be relocated  |
| Water<br>Resources<br>(Wetlands) | No impact  | Retention<br>pond would<br>be located<br>near a wetland  | Retention<br>pond not near<br>wetland  | Retention<br>pond not near<br>wetland  | Retention<br>pond not near<br>wetland   |



#### 2.4.1 Preferred Alternative

The Conventional Diamond Interchange alternative is recommended as the most cost effective alternative which meets traffic objectives. This alternative accommodates future travel demand, does not degrade the operation of SR 85, maintains an acceptable level of service and eliminates the need for an additional access location. It requires the least right-of-way of the alternatives and has the least potential of impacting the surrounding environment.

It is recommended that the Conventional Diamond Interchange alternative proceed as one of the alternatives to review... (7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

# 3 Affected Environment

#### 3.1 Overview

This chapter describes the existing environment at the intersection. The affected environment is the description of the area as it exists before any proposed change takes effect.

Relevant resources are those that may have an influence on the decisions to be made in the construction, operation and maintenance of the proposed intersection overpass. The resource may be relevant because it is a required topic (air, cultural, etc) or potentially impacted. Impacts may be neutral, positive as well as detrimental for inclusion in this section. Resources

that are normally discussed in an EA but are not of particular importance to this specific site will be discussed in the next section.

#### Chapter Organization:

Relevant Resources for study:

- Air
- Biology (species specific)
- Land Use
- Safety
  - o BASH
  - o UXO
- Traffic (transportation)
  - Lighting
- Utilities & Infrastructure
- Wetlands

Resources identified but not studied in detail:

- Acoustic (Noise)
- Biology (T&E species not present)
- Bounds Analysis
- Cultural Resources
- Environmental Justice and Child Safety
- Environmental Restoration Program
- Geology/Soils
- Hazardous Materials/Hazardous Waste
- Hydrology / Flood Plains
- Socioeconomic Issues

# 3.2 Air Quality

# 3.2.1 Existing Conditions

Although mission activities at Eglin result in significant sources and volumes of air emissions, the regional air quality is good, attaining both federal and state standards (FDEP). The input of air emissions from land areas within Okaloosa, Santa Rosa, and Walton Counties is small due to the lack of heavy industry. At Eglin, air pollutants are emitted from mobile and stationary sources, including general maintenance activities, government-owned and personally owned vehicles, jet engine testing, aircraft operations, and prescribed burning for forestry management, as well as wildfires inadvertently caused by mission activities and test and training operations, and open burning/open detonation of unexploded ordnance. Table 3-2 shows the calendar year and

mobile sources at Eglin per the *Calendar Year 2007 Air Emissions Inventory Report* (U.S. Air Force, 2008b).

Table 3 Eglin AFB Total Air Emissions (2007)

| Emission                   | Tons per year (2007 data) |  |  |
|----------------------------|---------------------------|--|--|
| Carbon monoxide            | 65.96                     |  |  |
| Nitrogen oxides            | 86.01                     |  |  |
| Volatile organic compounds | 162.95                    |  |  |
| Particulate matter         | 91.57                     |  |  |
| Sulfur dioxides            | 3.96                      |  |  |

Source: U.S. AF, 2008 Air Emissions Inventory Report

The magnitude and significance of a pollutant concentration is determined by comparison with federal air quality standards. These standards represent the maximum allowable concentrations of various pollutants that may be present, while still protecting public health and welfare with a reasonable margin of safety. The USEPA has established Federal standards, termed the *National Ambient Air Quality Standards* (NAAQS). The NAAQS address six criteria pollutants, and identify maximum allowable concentrations for ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>), and lead (Pb) (Clean Air Act [CAA], Title 40 Code of Federal Regulations [CFR] Sections 50 through 51). Okaloosa, Santa Rosa, and Walton Counties are in attainment for all NAAQS, therefore a conformity analysis is not required.

A "closed box assessment" (CBA) provides a method to estimate short-term impacts from various emissions types in a given area of space and was used for this effort. For this assessment, a volume of air is defined by vertical and lateral boundaries. For the Eglin Range, the vertical boundary of altitude established was 3,000 feet above sea level (ASL) and the dimensional area within the Eglin Range was utilized for lateral boundaries. Table 3-3 illustrates the results of the CBA and compares those results to the primary NAAQS. Appendix D, *Air Quality Supplemental Information*, details the NAAQS and calculation methodologies utilized in the CBA.

**Table 4 Closed Box Assessment NAAQS** 

| Criteria Pollutant | Average Time | NAAQS(ppm) |  |
|--------------------|--------------|------------|--|
| CO                 | 1-Hour       | 35         |  |
| СО                 | 8-Hour       | 9          |  |
| $NO_X$             | Annual       | 0.053      |  |

| $SO_2$    | 3-Hour                                | 0.5                  |
|-----------|---------------------------------------|----------------------|
| $SO_2$    | 24-Hour                               | 0.14                 |
| $SO_2$    | Annual                                | 0.03                 |
| $PM_{10}$ | 24-Hour                               | $150 \text{ ug/m}^3$ |
| $PM_{10}$ | Annual                                | 50 ug/m <sup>3</sup> |
| Ozone     | Florida standards not established for |                      |
|           | ozone                                 |                      |

μg/m³ = micrograms per cubic meter; CO = carbon monoxide; NAAQS = National Ambient Air Quality Standards; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> = particulate matter less than or equal to 10 microns in diameter; ppm = parts per million; SO<sub>2</sub> = sulfur dioxide

## 3.2.2 Regional Air Quality

In addition to the CBA, this EA compares the overall emissions to the Region of Influence (ROI) surrounding the intersection. The county where the intersection is located defines the ROI, and in this instance the intersection is in Okaloosa County bordered by Santa Rosa and Walton counties. This EA then compares the emissions emanating from historic mission activities to the 2002 National Emissions Inventory (NEI) for the ROI. For the EA analysis, a threshold of individual pollutant emissions not exceeding 10 percent of the total for the ROI's emissions for each pollutant has been selected as the criterion.

Table 5 County Data from National Emissions Inventory 2002

|                         | Emissions (tons per year) |        |        |       |        |
|-------------------------|---------------------------|--------|--------|-------|--------|
|                         | СО                        | NOx    | PM     | SOx   | VOC    |
| Total Okaloosa County   | 63,273                    | 7,132  | 8,736  | 839   | 10,333 |
| Total Santa Rosa County | 53,052                    | 11,095 | 14,308 | 3,012 | 8,519  |
| Total Walton County     | 33,893                    | 4,681  | 7,785  | 246   | 4,890  |

CO = carbon monoxide;  $NO_x$  = nitrogen oxides; PM = particulate matter;  $SO_x$  = sulfur oxides; VOC = volatile organic compounds

# 3.3 Biology (Relevant Species)

Several species of concern may be present at some point during the two years the project would take. The area would be surveyed prior to construction and checked periodically. Any discovery of a threatened or endangered species would require the animal be given space and time sufficient to escape. More detail is addressed in section 4.

# 3.3.1 Eastern Indigo Snake

The eastern indigo snake (*Drymarchon corais couperi*) is listed as a federal and state threatened species and is the largest nonvenomous snake in North America. The primary reason for its

listing is population decline resulting from habitat loss and fragmentation. Movement along travel corridors between seasonal habitats exposes the snake to danger from increased contact with humans. Indigo snakes frequently utilize gopher tortoise burrows and the burrows of others species for overwintering. The snake frequents flatwoods, hammocks, stream bottoms, riparian thickets, and high ground with well-drained, sandy soils. The indigo snake could occur anywhere on Eglin AFB because it uses such a wide variety of habitats (U.S. Air Force, 2006).

The species is extremely uncommon on Eglin AFB with the sighting of only twenty-nine indigo snakes throughout Eglin AFB from 1956 to 1999. No confirmed indigo snake sightings have been recorded since 1999 (Gault, 2009). Most of these snakes were seen crossing roads or after being killed by vehicles. It is difficult to determine a precise number or even estimate the numbers of these snakes due to the secretive nature of this species (U.S. Air Force, 2006).

## 3.3.2 Gopher Tortoise

The gopher tortoise (*Gopherus polyphemus*), a state-threatened species, is found primarily within the Sandhills and Open Grassland ecological associations on Eglin, where it excavates a tunnel-like burrow for shelter from climatic extremes and refuge from predators. The primary features of good tortoise habitat are sandy soils, open canopy with plenty of sunlight, and abundant food plants (forbs and grasses). Prescribed fire is often employed to maintain these conditions. Nesting occurs during May and June and hatching occurs from August through September. Gopher tortoise burrows are important habitat for many species, including the federally-listed indigo snake (U.S. Air Force, 2006).

A majority of the surveys for gopher tortoises are for projects that may impact gopher tortoises. Eglin Natural Resources Section does resample known population sites every 3-5 years (Refer to INRMP).

# 3.3.3 Migratory Birds

Description of MBTA: "The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the provisions of the MBTA it is unlawful "by any means or manner to pursue, hunt, take, capture or kill any migratory bird except as permitted by regulations issued by the Fish and Wildlife Service. The term "take" is not defined in the MBTA, but the Service has defined it by regulation to mean to pursue, hunt, shoot, wound, kill, trap, capture or collect any migratory bird, or any part, nest or egg or any migratory bird covered by the conventions or to attempt those activities.

Migratory birds pass through the region of influence (ROI), but Eglin is not considered an important stopover area or concentration site for neotropical migratory birds in the spring or fall (Tucker et al., 1996). Breeding neotropical migrants at Eglin are primarily found in riparian, hammock, and barrier island habitats. These areas can serve as temporary habitat for neotropical birds migrating to and from the Caribbean and South and Central America. Neotropical migrants are more common in the Eglin areas during fall migration than spring migration (Tucker et al., 1996)."

#### 3.4 Land Use

The land use at the proposed site is active roads bordered by unimproved military property. The project would not affect land use at the project site. The U.S. Air Force would be providing an easement to provide additional right-of-way, and this action does require a change in land use in the easement. The Air Force would conduct further analysis for potential land use impacts – Environmental Baseline Study or EBS is required to expand the required right of way.

Gas, water, and electrical utilities all have active right of way in the area. The rights of ways are cleared of trees, periodically mowed and have easy vehicle access for maintenance. Right of way easements would need to be updated to reflect any changes in utility placements.

SR 85 at the proposed overpass site is currently a divided 4 lane road with a grassy median. The total width of the cleared (mowed) area including shoulders is 250 feet. The interesting road (77 SFW) has 2 lanes with no constructed shoulders; however it is cleared approximately 120 feet – 150 feet wide. Any proposed construction would include disturbing the surrounding woodlands, require importing fill material, creation of retention pond(s), expanding the roads to the 7 SFG and Duke Field to handle increased traffic (completed in 2009). As six acres of the proposed area is existing roadway and cleared area, new construction could impact (clear) an additional 17.25 (option A) to 35.25 acres depending on the final design and pond location.

The proposed SR 85 interchange would be located in Okaloosa County, Florida. The project is located in Section 28, Township 2 North and Range 23 West. The existing SR 85 roadway is a four-lane divided rural highway and is classified as a principal arterial. The roadway is part of the Strategic Intermodal System. The posted speed limit of the facility within the project limits is 65 mph. The roadway falls within unincorporated Okaloosa County, providing direct access north and south to the adjacent cities of Crestview, Niceville, Valparaiso, and Fort Walton Beach, respectively. The existing West McWhorter Avenue is a rural highway leading to Duke Field. The posted speed limit for West McWhorter Avenue is 45 mph.

The proposed 7th Special Forces Group Complex is planned to be opened in year 2011. The opening and interim year in this analysis are the same. This is because the base facility (7<sup>th</sup> Special Forces Group and BRAC driven F-35 mission impacts at Duke Field) and the interchange would be opened in 2011. ...

(7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study prepared by the USACE)

Construction of the 7SFG facility began in the spring of 2009 and is continuing.



Figure 13 MAP: McWhorter improvements, Substation, easements, UXO & Wetland

# 3.5 Safety

Safety is the absence of risk. As risk is inherit to life, it would be better to say that practicing safety is the management of known or suspected risks. The signalized traffic intersection has not been in operation long enough to gain any meaningful statistics. As only very light cross traffic was previously present the intersection was quiet with few reportable incidents.

# 3.5.1 BASH (Bird/Wildlife Air Strike Hazard)

Duke Field complies with "Hazardous Wildlife Attractants on or Near Airports, 8/28/2007, AC No: 150/5200-33B" a Federal Aviation Administration (FAA) circular to comply with Air Force Safety efforts to minimize aircraft bird strikes. Eglin as a whole has had a low incidence of bird strike with none resulting in the loss of aircraft or life (other than the bird) in the past 10 year reporting period.

The FAA has assumed all authority for air management and flight safety standards. The DoD has adopted the FAA standards for all air operations and safety as put out by the FAA.

#### 3.5.2 UXO

Unexploded ordinance (UXO) is a hazard associated with range activities. The area to the south west of the proposed project has been cleared in a very limited area to include the current drainage pond.

As can be seen in the map below, testing activity since 1936 has left large areas with a dispersed UXO burden. UXO is a generic term applied to any spent (fired or dropped) munitions (explosive), abandoned live and unfired munitions, duds (munitions that failed to ignite and explode), munitions inert shapes (concrete filled non-explosive bombs), spent canon cartridges (empty casing), spent cannon projectiles, hand operated explosives such as grenades and rockets, and experimental explosive components (any part of a bomb) that was discarded.

Until it was prohibited by law, proper disposal of munitions as listed above was to bury them. The current disposal methods include detonation, incineration, open burning, shredding, recycling, and hazardous waste disposal at specified and permitted sites. UXOs on live ranges are periodically identified and removed by one of the mentioned methods. UXOs often penetrate below grade and are not discovered during these investigations. Ordinance presents a hazard as explosives may break down to less stable, less safe, compounds that have dangers of handling not associated with the original ordinance. Even "dud" munitions may contain explosives of dangerous proportions. Impacts with construction equipment, handling, tripping over, walking near, or other unintentional or intentional disturbing of a UXO may cause a spontaneous detonation. 46 TW treats all UXO areas as inexact as experience shows the map locations may not contain all UXO items.

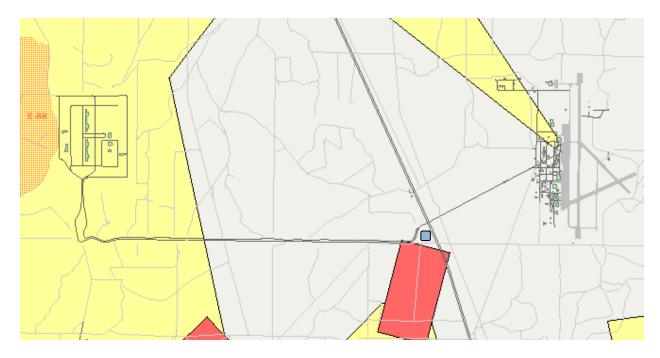


Figure 14 Map: UXO of 7 SFG and Duke Field

Figure 20 area in red is the "probable UXO" area. Yellow denotes "possible UXO" areas. The red rectangle below the intersection was cleared only at the areas required for the construction of 77 SFW. The current detention pond was cleared prior to construction.

# 3.6 Traffic (Transportation)

The existing stop signal is covered under the EGLIN AFB 2005 BRAC PROGRAM EIS (FEB 2009) decision and was implemented as an expedient and necessary change to SR 85 traffic for the interim safety of motorists entering and exiting the 7 SFG area. As the 7 SFG is not active at this time and the area is still under construction. All impacts are to the traffic north and south bound as of this writing. Traffic to Duke Field is essentially unchanged. The 7 SFG is expected to occupy their new facility in FY 11, increasing traffic. Pending Supplemental BRAC 2011 EIS decisions may increase Duke Field traffic depending on the alternative selected.

## 3.6.1 Lighting

The area is currently unlighted other than the signalized lights themselves. No light poles were installed at the intersection. Duke Field is the nearest location of any street lighting.

#### 3.7 Utilities

Utilities in the area include:

- Cellular towers
- Water lines
- Communication Cables
- Electrical lines (local service)
- Gas mair
- High Voltage Electrical Transmission lines

The electrical substation to the south east was recently upgraded and expanded in anticipation of the mission growth of the 7 SFG and Duke Field. The substation is 1,000 feet from the intersection.

NOTE: The 7 SFG sewer line will not run through this area.

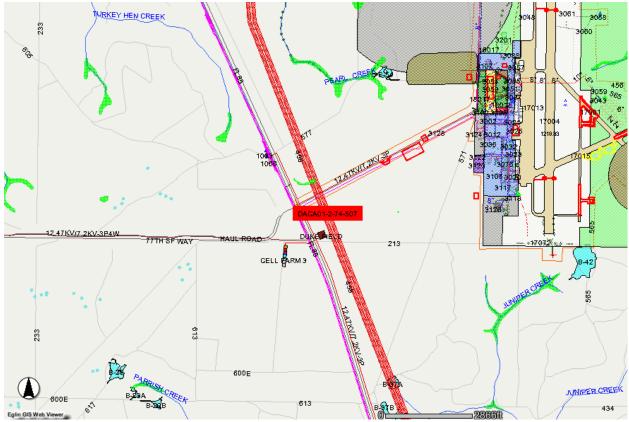


Figure 15 MAP: Utilities

# 3.8 Wetlands

Turkey Hen Creek, Pear Creek, Silver Creek, Juniper Creek, and Parish Creek are all within 1 mile of the construction site. None are closer than 3000 feet. A small wetland is identified 400 feet to the north east of the McWhorter and SR 85. No stream or wetland is directly impacted by the construction proposed. Sediment controls would be required as the project will exceed 1 acre.

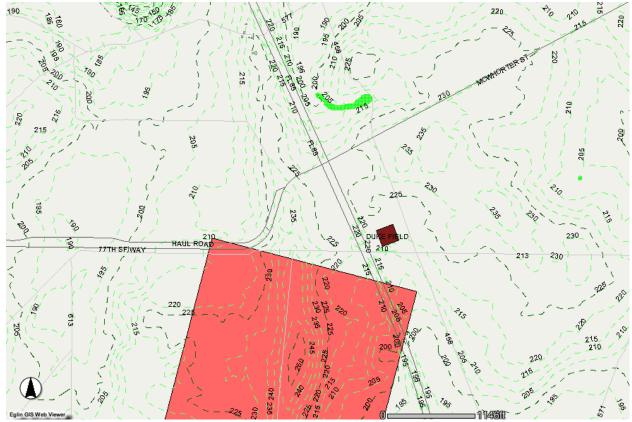


Figure 16 MAP: Elevation at interchange

# Resources Identified but not studied in further detail

Based on the scope of the Proposed Action, and the No Action Alternative, as well as preliminary analyses, the Air Force eliminated the following issues from further in-depth analysis. The process of elimination is not to imply the subject was not examined or of importance, rather a degree of knowledge exists to comfortably exclude it from further analysis.

# 3.9 Acoustic (Noise)

Noise associated with this project would result from the use of construction and land-clearing equipment. The heavy equipment would produce noise, particularly during site preparation. The project area is not located near any residential areas. Traffic noise will increase over time proportionally with increased use. The change from a stop signal to an overpass would eliminate noise associated with the start and stop of traffic (truck shifting, high engine RPM and braking) along the main road but would not eliminate the noise from the exiting traffic. On balance, the noise would remain unchanged from the present including the increased flow to the 7 SFG and Duke Field as shown in the USACE study projections.

The Air Force has concluded that noise is not an issue to be studied in detail, due to the lack of receptors in close proximity to be disturbed by noise.

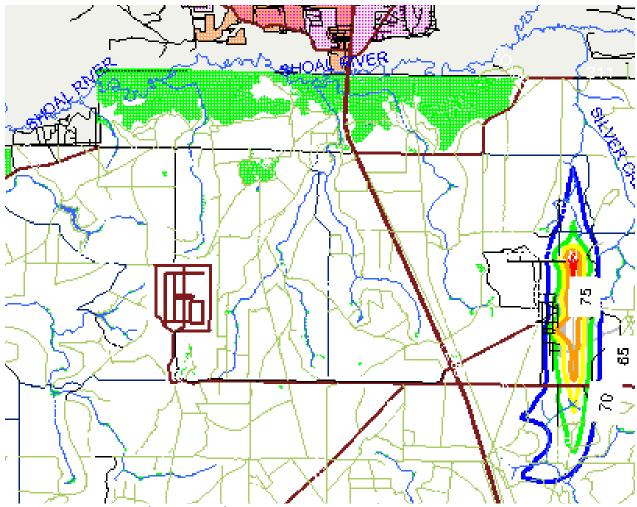


Figure 17 MAP: Auditory (Noise Impact)

# 3.10Biological (species not impacted)

The following threatened or endangered species may all be found in northern Florida, Georgia, Alabama, in other similar habitat, somewhere on the Eglin reservation, but not necessarily at the project site. The impact of the specific project is very limited in size and therefore has very limited impact on biological resources. The North West Florida species of concern are listed and discussed in the following section with statements as to why they were. Species that may potentially be impacted are discussed in chapter 4.

# 3.10.1 Bald Eagle

The Eglin reservation has nesting bald eagles and they can forage anywhere including the area of concern. However, no nests are known to be within 5 miles and no direct or cumulative impact is anticipated to eagle populations.

#### 3.10.2 Florida Black Bear

The Florida black bear (*Ursus americanus floridanus*) is currently listed as a state threatened species except in Baker and Columbia counties and Apalachicola National Forest. Florida black bear populations are currently found in Florida and Georgia, as well as a small population in Alabama. Reasons for population declines throughout Florida and Georgia include loss of habitat due to urban development and direct mortality due to collisions with vehicles. Eglin AFB is considered to be the smallest population, with an estimated sixty to one-hundred individuals; however, Eglin's black bear population has shown signs of increase since the early 1990s. Black bear in Florida breed in June/July, and young are born in January/February. Most black bears within Eglin AFB utilize the large swamps and floodplain forests in the southwest and northern portions of Eglin AFB, where they feed on fruits, acorns, beetles, and yellow jackets. Black bear sightings have occurred at numerous locations throughout Eglin AFB, the majority of which have been within the interstitial areas (U.S. Air Force, 2006).

Three recorded black bear road kill incidents have been recorded in the immediate area of the project (within 1 mile) along SR 85. The future traffic projected along this highway represents an opportunity for continued vehicle/bear collision. The actual proposed construction is not expected attract bears or to impact bear habitat. Signs are posted along the highway to warn motorists of the presence of bears.

## 3.10.3 Red-Cockaded Woodpecker (RCW)

The RCW (*Picoides borealis*) is listed as a federally endangered bird species and a state species of special concern. The RCW excavates cavities in live longleaf pine trees that are at least 85 years old. The RCW historically had a habitat range as far north as New Jersey and as far west as Oklahoma. Today, the RCW has been restricted to the southeastern United States, from Florida to Virginia and to southeast Texas, due to a loss of habitat. In the southeast, 98 percent of the longleaf pine forests have been removed, making federal lands such as Eglin AFB primary habitat for the species. Due to the preservation and continuity of longleaf pine forests on Eglin, the Eglin Range has one of the largest remaining populations of RCWs in the country. In 2003, the USFWS identified Eglin AFB as one of thirteen primary core populations for the RCW (U.S. Air Force, 2006).

The removal of longleaf pine trees, degradation of quality habitat, and noise generated from mission-related and other activities are potential threats to the RCW on the Eglin Range. Eglin is executing an approved USFWS management strategy to meet certain growth objectives of the RCW and to obtain increased mission flexibility with the federal requirements for RCW impacts (U.S. Air Force, 2006). The U.S Fish and Wildlife Service species recovery plan for the red-cockaded woodpecker (RCW) established 350 potential breeding groups as the population goal for Eglin and 9 other primary core populations. As of August 6, 2009, a total of 371 potential breeding groups have been documented (Figure 3). This meets Eglin's recovery goal as established in the official species recovery plan. Eglin is currently working with the USFWS to

amend the RCW Component Plan to the Integrated Natural Resources Management Plan (INRMP) and associated Biological Opinion to incorporate new management operations to continue with a mission flexibility goal of 450 potential breeding groups.

The RCW has been federally listed as "endangered" since 1970. Nesting sites are old growth (flat topped) long leaf pine trees. The nesting trees are clearly marked with a white band and have a visible hole over 10' up the trunk with sap running down the trunk. Nesting sites take a great effort and time (up to 2 years) on the part of the bird to create and require multiple suitable trees for the birds to live in. Also the tree cover and undergrowth typical of a mature forest that has well spaced mature trees, short under story, and has frequent but "cool" fires is ideal. Several abandoned nests are known to exist within 300 yards of the proposed site. The species is clearly living within 1 mile of the site to the south west, beyond the 7 SFG compound. It appears to tolerate the light traffic and hunting activities in this area. The entire area is generally considered good forage for the RCW.

Conditions in the forest at the junction of the highway to be used for the overpass are not favored by RCW for nesting. The trees are either too dense, too young or cleared. The area may become a future nesting site as the long leaf pines are growing in the area, however very few mature trees are within ½ mile radius. Also there is a 200' clearing high power-line access running parallel with SR 85 on the Duke Field (east) side.

Eglin Natural Resources Section has aggressively managed a recovery plan for the RCW for the past 20 years. By creating artificial homes in mature long leaf pines, controlled burns to restore ideal understory and food sources, tree thinning and other forest restoration projects; the RCW populations have thrived at Eglin. As no RCW are in the immediate area of the proposed project and are not expected to exhibit any additional stress from noise or other traffic related issue, no further evaluation is required.

Eglin Natural Resources Section has completed a land survey of the area as part of the installation of the traffic signal and would do a follow on survey immediately prior to the construction of an overpass.

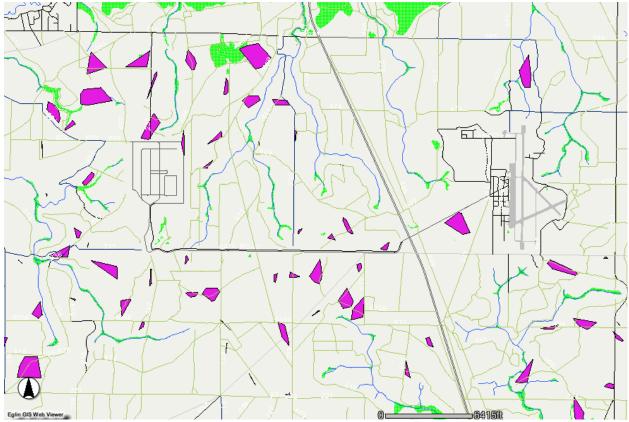


Figure 18 MAP: Red Cockaded Woodpecker nest trees (red) and Wetlands (green)

#### 3.10.4 Reticulated Flatwoods Salamander

The federally listed (threatened) flatwoods salamander is a small amphibian, rarely exceeding 13 centimeters in length. Optimum habitat for the flatwoods salamander is open, mesic (moderately wet) woodland of longleaf pine/slash pine flatwoods maintained by frequent fire. These salamanders exist as isolated populations scattered across the remaining longleaf pine/slash pine flatwoods. Pine flatwoods typically consist of flat open woodlands lying between upland Sandhill communities and downslope wetlands. Adults migrate between isolated wetland breeding sites and their normal flatwoods habitat where they live in underground burrows. Flatwoods salamanders require a moist environment in order to maintain moist skin for respiration and osmoregulation (i.e., to control the water and salt content in their bodies). Therefore, they are not suited to life in the Sandhill ecology which is the area of concern.

Reticulated flatwoods salamander is not an issue. No potential or confirmed ponds are located in project area. The project area is dry woodlands; no suitable habitat would be impacted. Note the proposed detention pond would not create suitable habitat.

# 3.11Bounds Analysis

Project bounds analysis is the study to verify the impacts are confined as intended. Bounds are the physical limits to describe the actual project impact (normally the construction site). The next level is to the area that was not intentionally disturbed immediately surrounding the project. In an urban area this would be the surrounding city block and the traffic around it. In rural areas, this would be an area large enough to include a buffer of stable maintained or natural area. The last bound is to examine an area to the extent of the impact that is measurable. In many instances this would be to the air shed, watershed, or nearest population center.

The action proposed has multiple sets of bounds to be considered. The first is the area of the proposed construction. This would encompass 17.25 to 35.25 acres (depending on the option chosen) including all removed trees, disturbed soils, ponds created, and new ramps. The construction zone within 1,000 feet of the center of the intersection would receive the greatest impact. The map (figure 18) shows this as a RED circle. It is the area that would suffer total loss of habitat, earth moving, and sealing with asphalt. The human impacts here would be immediate and long term as it is and would remain a transportation throughway.

The next bound to consider is the relatively undisturbed area surrounding the project shown by the 1 mile yellow circle. The remaining forest would still be habitat; the new pond would attract birds and harbor plants. Stabilization of the soils with grasses would attract deer and other herbivores to graze. Traffic noise and pollution would have the greatest impact here. This bound is primarily the one discussed in the section 2.

The last bound studied is the 5 mile green circle. Here is the 46<sup>th</sup> TW, 7 SFG and Duke Field. The communities at both ends of SR 85 Crestview to the north and Niceville/Valparaiso to the south are also included in this level of study.

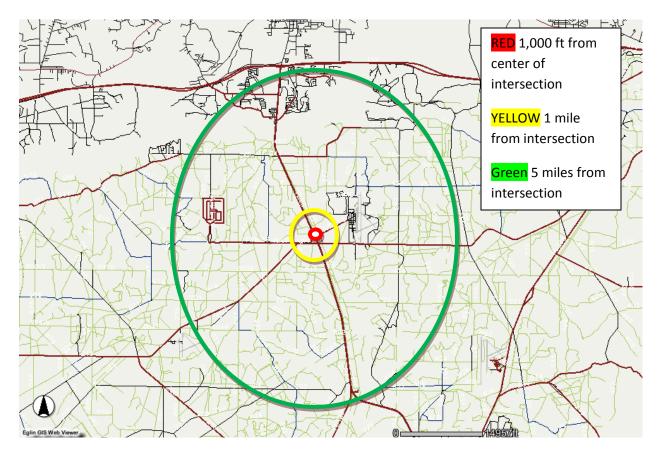


Figure 19 MAP: Bounds of Cumulative Impact

#### 3.12Cultural Resources

Section 106 of the National Historic Preservation Act of 1966 requires that federal agencies analyze the impacts of federally directed or funded undertakings on historic properties.

Previous archaeological surveys of the area by Eglin Cultural Resources Section revealed no eligible resources to be present. These investigations were reviewed by the Florida SHPO and concurrence received (2006, 2007). Nearby Duke Field has several buildings dating to WWII and the Cold War that have been evaluated as ineligible. SHPO documentation is located in Appendices C and D.

All ground-disturbing activities at Eglin should be subject to prior consultation with and approval of Eglin's Historic Preservation Section, which oversees and maintains records on all cultural resource activities on the base. If any work not included as part of the Proposed Action or Alternatives put forward in this EA is required in the future, these plans should be coordinated with Eglin's Cultural Resources Branch (96 CEG/CEVSH) office prior to their approval and implementation.

3.13 Environmental Justice and Child Safety

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, assures that federal agencies focus attention on the potential for a proposed federal action to cause disproportionately high and adverse health effects on minority populations or low-income populations. Preliminary analysis showed that no environmental justice concern areas of low-income and/or minority populations were adjacent to the proposed site. The vicinity of the project site is predominantly unimproved military property with the closest civilian land use being Crestview (5 miles) and the northern end of Niceville (7 miles). There are no residential areas within five miles of the Proposed Action.

As noted in the Auditory map, Duke Field operations generate peak noise from C-130 aircraft operations (2005 data). The while the noise of the added traffic would have little impact, the noise from air operations would have an impact on traffic through the area. F-35 aircraft passing overhead or performing training maneuvers (touch and go, full stop landings, vertical takeoff, emergency procedures training, and full power take off) would occasionally generate enough noise to prevent verbal communication at the intersection (over 65 dB) and on occasion at any point along the entire SR 85 corridor. Sudden noise from fast moving aircraft may startle vehicle operators and local fauna in the same manner as thunder. The BRAC EIS supplement for F-35 operations due out in 2011 should cover this impact in depth.

# 3.14Environmental Restoration Program

Environmental Restoration Program (ERP) sites are locations of known environmental contamination. The typical ERP site would be a landfill or fuel leak site. The USAF is aggressively closing (cleaning) all identified sites. No active ERP sites are located within the boundary (1 mile) of the proposed site construction.

ST-69 on Duke Field is the nearest ERP site (approximately 5200ft) listed in the Eglin AFB geoviewer database. This would not be impacted by the proposed action. Other sites are on Duke Field, well beyond 1 mile and would not impact this site.

Environmental restoration sites are locations identified as having measurable quantities of a foreign substance in the soil. Typical Eglin sites are from past fuel storage and use that leaked to nearby soils or landfills. The USAF has taken a very aggressive approach to treat such sites and to have them closed, caped or treated so they pose no future hazard.



Figure 20 MAP: Installation Restoration Program sites

# 3.15 Geology and Soils

Much of the Eglin region is underlain by non-cohesive sandy sediments that were deposited by marine processes during Tertiary and Quaternary times. The materials occurring at the surface are relatively clean sands classified as Lakeland Series soils (found on up to 78 percent of the reservation). Other surface soils found at Eglin include the Tifton and Troup Series. These soils are characterized as having a high infiltration rate when thoroughly wetted. They consist chiefly of deep, well-to-excessively drained sands or gravels with a high rate of water transmission that produces a low surface runoff potential. They also have a very low content of clay and typically include loose sands through loamy sandy soils (U.S. Air Force, 2003).

The proposed construction area is primarily gravel and sand composite. Drainage is excellent, topsoil is thin, and some pockets of muck/clay are nearby. No noted sinkholes are in the area.

The area under consideration is comprised of Lakeland sand and Troup sand. No other soil types are identified within 1 mile (Eglin GIS Web Viewer).

# 3.16 Hazardous Materials / Hazardous Waste

Hazardous materials and hazardous waste issues are associated with the use of hazardous materials or generation of hazardous waste during project activities. Included in this category

are Environmental Restoration Program (ERP) sites and areas of concern (AOCs), which are locations that the Air Force has identified as known, or suspected, to be contaminated. FDOT would not utilize hazardous materials during construction activities.

The construction of the overpass would involve the use of materials that can be classified as combustible, corrosive, ignitable, toxic, and reactive. Control over the storage and use of these materials would be maintained and monitored by the owning contractor and subject to inspection. Materials that may become or are hazardous waste would be disposed of properly.

The 46 TW is interested in utilizing the overpass as a major corridor to transport targets and other heavy or bulky items across the range. Vehicles to be used as targets are drained of all fluids prior to transport. Vehicles to be used that are driven to the ranges would be in sound mechanical condition. Any spills would be handled as they currently are by the operators and the Eglin spill response team.

For more information on Eglin AFB Hazardous Materials handling contact 96CEG/CEVCP 850-882-7684

## 3.17 Hydrology

Regional groundwater resources consist of two aquifers (areas where groundwater exists in ample quantities), the Sand and Gravel Aquifer and the Floridan Aquifer. The Floridan Aquifer is located below the Sand and Gravel Aquifer and extends beneath most of Florida. Depth to groundwater in the Sand and Gravel Aquifer is approximately six (6) feet below ground surface, while depth to the Florida Aquifer varies greatly across the area. Around the Main Base area, the depth is around 450 below ground surface. Rainfall that falls on the land surface rapidly infiltrates the soil profile to recharge the shallow groundwater. The stored groundwater is released slowly to the surface water. Groundwater flow varies at each location, but is generally toward the south-southeast in the direction of major bodies of water, such as Choctawhatchee Bay (U.S. Air Force, 2003).

# 3.17.1 Floodplains

The area of the proposed overpass is well drained, with no streams or other water bodies in the immediate area. The area does not experience flooding (periodic or 500 year) and has no evidence of past floods. By definition there is no floodplain associated with this proposed action.

Floodplains are commonly encountered in Florida and just a commonly confused with wetlands. It has been observed that while wetlands are often in floodplains; floodplains are not necessarily wetlands. Environmental Protection Agency (USEPA) definitions are included for clarification to the general public.

As defined by the USEPA; "Generally, <u>wetlands</u> are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal

communities living in the soil and on its surface (Cowardin, December 1979). Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. Indeed, wetlands are found from the tundra to the tropics and on every continent except Antarctica.

For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." [taken from the EPA Regulations listed at 40 CFR 230.3(t)]"

No floodplains are within 7000 feet (Juniper creek) of the proposed area. The project has no direct impact on any Federal Emergency Management Administration (FEMA) floodplain. Several wetlands are highlighted on maps provided. Storm water runoff is addressed separately and managed by construction of ponds and other water detention strategies.

Note: Wetlands are addressed separately as they are not the same as floodplains.

#### 3.18 Socioeconomics

Socioeconomics addresses the potential for positive and negative impacts on the local economy. The local economy would experience a temporary positive impact during the construction phase of the project, because it would provide jobs in that industry. The Air Force does not expect any immediate or long term negative impacts on employment, housing, and base and county services.

This project is not part of the 2009 Stimulus Bill intended to generate jobs in the local economy. As the project would employ local construction crews for approximately 2 years, it would have a small but measurable positive impact on maintaining the local economy.

## **3.18.1** Housing

Military single (junior enlisted) members would have barracks on the 7 SFG compound. The location of military family housing is currently on the 6 RB compound, Eglin Main and Hurlburt Field. New military housing is projected to provide homes for Army personnel plus the housing available on Eglin and Hurlburt. The balance of the Army workforce would find private quarters and therefore be part of the commuting public on SR85.

Eglin AFB is in the process of privatization of housing and has not yet settled on a number of homes, location or locations for new housing or a definitive time table for construction. Area inventories of available homes and apartments remains high, however the cost of housing and housing saturation would force an unknown number of military members to choose to have

long commutes that would increase regional traffic. Reference: Military Housing Privatization Initiative (MHPI) Environmental Impact Statement (EIS), 2005 draft final.

The cumulative impact of the influx of the 7 SFG mission to Eglin would be stable or higher home market values, new construction once the surplus housing is filled, and additional traffic. This is covered in the BRAC EIS.

The action of constructing or not constructing an overpass would have no impact on local housing price or availability. Any impact would be related to Eglin AFB mission changes, safety, commute times, and lost resources impacts associated (air / water pollution) with traffic delays by commuters.

# 4 Environmental Consequences

Environmental consequences are verifiable associated changes to the human or natural environment or changes that can be reasonably expected based on observation and study of similar events.

#### 4.1 Evaluations of affected environment

The topics are to be covered in 3 major groupings: (1) No Action (2) Proposed Action and (3) options B,C,D. The alternative actions are nearly identical as the alternatives all describe the same location. The baseline (no action) is relevant as it represents a level of hazard to the human environment that is attempting to be remedied by the construction proposed. Alternatives B, C, & D are variations of construction and differ in foot print (17.25 to 35.25 acres), cost and traffic flow rates but are all at the same location utilizing the same construction methods. Functionally, the choice between the alternatives is fully discussed in the USACE study (as quoted in this report). Environmentally, the impact of all proposed alternatives is very similar and is therefore they (B, C, &D) are discussed as a group. The difference between alternatives for environmental impact purposes is choices B and D cover more acreage and require larger detention ponds as a result. The diagrams also denote different possible locations of the ponds. The 7th Special Forces Group Complex Area 1 Traffic Study identifies the inside of the large road curves as primary areas for stormwater.

#### 4.2 Relevant resources

- Air
- Biology (species specific)
- Land Use
- Safety
  - o BASH
  - o UXO
- Traffic (transportation)
  - Lighting
- Utilities & Infrastructure
- Wetlands

# 4.2.1 Air Quality

Air quality impact is assumed to be identical for all construction types (calculations are based on the largest area). The No Action air quality impacts are as stated in chapter 3 (ambient air). The calculated air impact verifies that all project air impacts are below all air quality thresholds for all alternatives. Okaloosa, Santa Rosa, and Walton Counties are in attainment for all NAAQS, therefore a conformity analysis is not required.

#### 4.2.1.1 No action alternative

All FDOT estimates in  $7^{th}$  Special Forces Group Complex – Overpass Traffic Study are for increased traffic through the SR 85 corridor. As this is a forested and unpopulated area, traffic is the main contributor to air quality degradation. Lower traffic speeds and stop and go traffic resulting from the addition of the traffic signal(s) on SR 85 adds to the degradation of air quality.

Cumulative Impact: the additional missions from EGLIN AFB 2005 BRAC PROGRAM EIS (FEB 2009) and increases in Florida traffic may challenge the air quality along the traffic corridor. At the current levels, no direct impact is observed. (See 3.2.1 for current air quality data) Future increased traffic but with new cars getting better gas mileage should slow or alter the rate of increase of pollutants (lower or no change).

## 4.2.1.2 Alternative A (Preferred)

As discussed in the no action alternative, moving traffic generates less pollution. Reducing driving times (at engine efficient speeds) generates fewer pollutants.

Cumulative impact: Traffic is expected to increase on the SR 85 corridor from multiple sources. Air quality would degrade without an outside factor such as vehicles getting better mileage, zero emission vehicles, carpooling, or public transportation. Other road improvements such as additional lanes of travel car-pool parking and travel lanes, and additional overpass construction is under consideration.

## 4.2.1.3 Alternative B,C,D

As discussed in the no action alternative, moving traffic generates less pollution. Reducing driving times (at engine efficient speeds) generates fewer pollutants.

Cumulative impact: Traffic is expected to increase on the SR 85 corridor from multiple sources. Air quality would degrade without an outside factor such as vehicles getting better mileage, zero emission vehicles, carpooling, or public transportation. Other road improvements such as additional lanes of travel, car-pool parking and travel lanes, and additional overpass construction is under consideration.

#### Methodology

Vehicle miles traveled data and percent of vehicle type were used to determine annual vehicle miles traveled by each vehicle class and calculate annual emissions. Unpaved road emissions were calculated using the unpaved mileage usage. Emissions were compared to the federal NAAQS and to Okaloosa, Santa Rosa, and Walton Counties data.

#### **Results**

Emissions from the use and maintenance of roads were compared to NAAQS and data from each of the counties in which Eglin AFB is located (Okaloosa, Santa Rosa, and Walton).

**Table 6 Road Construction Emissions Compared to NAAQS** 

| Criteria Pollutant | Average Time | NAAQS                 | Calculated Concentration |
|--------------------|--------------|-----------------------|--------------------------|
|                    |              | (ppm)                 | (ppm)                    |
| CO                 | 1-Hour       | 35                    | 6.650E-05                |
| CO                 | 8-Hour       | 9                     | 4.655E-05                |
| $NO_X$             | Annual       | 0.053                 | 1.272E-07                |
| $SO_2$             | 3-Hour       | 0.5                   | 3.229E-07                |
| $SO_2$             | 24-hour      | 0.14                  | 1.435E-07                |
| $SO_2$             | Annual       | 0.03                  | 2.870E-08                |
| PM <sub>10</sub>   | 24 Hour      | 150 μg/m <sup>3</sup> | 6.767                    |
|                    | Annual       | $50 \mu g/m^3$        | 1.353                    |

 $\mu$ g/m³ = micrograms per cubic meter; CO = carbon monoxide; NAAQS = National Ambient Air Quality Standards; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> = Particulate matter less than or equal to 10 microns in diameter; ppm = parts per million; SO<sub>2</sub> = sulfur dioxide

Emissions would be well within the federal standards. Emissions as compared to the counties were all below the 10 percent criteria. None of the emissions would be greater than 1 percent for any of the counties or criteria pollutants. No adverse impacts would be expected from the use and maintenance of the overpass.

Table 7 Emissions Compared to the Region of Influence

|                                  | Emissions (ton/yr) |        |        |        |        |
|----------------------------------|--------------------|--------|--------|--------|--------|
|                                  | CO                 | $NO_X$ | PM     | $SO_X$ | VOC    |
| Total Okaloosa<br>County         | 63,274             | 7,132  | 8,736  | 839    | 10,333 |
| Total Santa Rosa<br>County       | 53,052             | 11,095 | 14,308 | 3,012  | 8,519  |
| Total Walton<br>County           | 33,893             | 4,681  | 7,785  | 246    | 4,890  |
| Road Construction<br>Emissions   | 212.3              | 25.3   | 31.4   | 1.1    | 24.2   |
| % Okaloosa County<br>Emissions   | 0.11%              | 0.12%  | 0.12%  | 0.04%  | 0.08%  |
| % Santa Rosa<br>County Emissions | 0.13%              | 0.08%  | 0.07%  | 0.01%  | 0.09%  |
| % Walton County<br>Emissions     | 0.21%              | 0.18%  | 0.13%  | 0.15%  | 0.17%  |

## 4.2.2 Biological

Sections 2 and 3 discuss what species of concern exist. This section covers how the specified action changes things. The changes can be generalized as all the organisms would have most of the same obstacles to deal with.

#### 4.2.2.1 No Action Alternative

Under the no action alternative, the additional traffic would eventually force FDOT to lower traffic speeds. This may allow for more driver reaction time and save the occasional animal. As traffic at night is expected to increase from the Special Forces, the likely case is the incidence of animal / vehicle incidents would not change regardless of speeds.

Bear road kill incidents, currently about 2 per year on SR 85 through Eglin, would continue to occur. Deer and other non-threatened species are frequently observed along on roadsides and present a hazard to vehicle traffic throughout the panhandle.

Traffic is expected to increase under all alternatives including the no action alternative. Animals would pull back from this area for feeding and resting. As this is not a new action, little change in resident populations would occur. The animals that have adapted would remain and others may also adapt.

The No Action alternative consumed some acreage as the signalized intersection required the building of the 7SF way connection and a small detention pond. Habitat (6.8 acres) was taken for this project. The preexisting area was forest/savanna.

Table 8 comparison of acreage required

|                     | No Action | Option A<br>(preferred) | Option B | Option C | Option D |
|---------------------|-----------|-------------------------|----------|----------|----------|
| Detention Pond acre | 0.8       | 1.85                    | 2.17     | 2.14     | 2.24     |
| Right of Way acre   | 6.0       | 15.4                    | 32.63    | 25.73    | 33.01    |
| Total acres         | 6.8       | 17.25                   | 34.80    | 27.87    | 35.25    |

# 4.2.2.2 Alternative A (preferred)

The construction of the Conventional Diamond Interchange should have no effect on threatened or endangered species as stated in the "no affect" letter.

A "Biological Assessment of No Effect to Threatened or Endangered Species" letter is on file with US Fish and Wildlife Service. Letter is attached in the appendix.

The reduction of habitat acreage when compared with the 400,000 acres of Eglin range is 0.00875%. Fires both natural and manmade scorch 100,000+ acres of Eglin range annually. The loss to fire is promoted as a method of opening grasslands and controlling brush. Unlike a fire, the re-growth at the intersection over pass would be limited to grasses.

There is a possibility species may be encountered and require management to avoid environmental harm. The specific are listed at 4.3. 4 as they apply to all alternatives.

#### 4.2.2.3 Alternative B, C, & D

Alternatives B, C, & D have environmental impacts essentially identical to Alternative A (preferred). The small difference is these alternatives have a marginally larger forest area (see table 7) reduction due to the clover leaf lanes in alternative B & C, detention pond placement and size than alternative A. All alternatives have the same air, water, biological, historic/cultural, and other impacts. Traffic flow as shown in the USACE study is marginally different in the models. The most difference is between No Action and any of the choices. Alternative A is by default environmentally preferred as it has the least total impact (smallest disturbed acreage).

Therefore, alternatives B, C, and D are not repetitively studied in this EA as it would simply repeat statements already given.

For environmental purposes therefore, the proponent is free to choose any of the alternatives with the caveat that the larger alternatives would increase storm water runoff and habitat loss proportionately. Engineering controls would be designed into the proposals to compensate.

Cumulative Impact: The **Biological Assessment of No Effect to Threatened or Endangered Species** letter specifies these considerations to achieve the "no effect".

#### **Gopher Tortoise**

Eglin NRS would complete a gopher tortoise survey at least one month prior to start of construction. If tortoise burrows are found to conflict with proposed site, and cannot be avoided, the tortoise(s) must be relocated in accordance with the Florida Fish and Wildlife Conservation Commission (FWC) protocols.

Prior to project initiation a gopher tortoise survey would be required. If a gopher tortoise burrow cannot be avoided, then the tortoise would be relocated in accordance with the Florida Fish and Wildlife Conservation Commission (FWC) protocols.

## **Indigo Snake**

Eglin Natural Resources Section has been requested to survey the area of expected disturbance (at a minimum) immediately prior to the construction of an overpass.

Mitigations for indigo snake: "Construction personnel would be provided a description of the eastern indigo snake and its protection under Federal Law. Indigo snake signs would be provided by Eglin Natural Resources and posted at construction site. Personnel would be given instructions not to harass injure, harm, or kill this species.

Should an indigo snake be sighted, construction personnel would be directed to cease any activities and allow the eastern indigo snake sufficient time to move away from the site on its own before resuming such activities. Personnel would contact Eglin Natural Resources Section immediately."

## **Migratory Birds**

"The Proposed Action would potentially impact 17.25 to 35 .25 acres of migratory bird habitat with the preferred alternative impacting 17.25 acres. The proposed activity has the potential to cause adverse impacts to the resource. During this time, potential impacts would be greatest as land clearing could interrupt breeding and injure or kill adults and young. To avoid impacts to migratory birds, land clearing should occur on or after September 1 through March 15 to avoid the nesting season. The Migratory Bird Treaty Act (MBTA) does not contain any prohibition that applies to the destruction of a migratory bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. If clearing occurs before September 1 or after March 15, care would be taken to leave snags in place. If snags (A dead tree that is still standing) need to be removed for construction purposes, they may be removed after September 1. Activities would cease if active bird nests with eggs or young are found. Coordination with Eglin Natural Resources Section, 96 CEG/CEVSN, is required prior to project initiation to ensure compliance with the MBTA."

As trees would be cleared along the sides of SR 85 for the ramps, potential migratory bird impacts must be examined prior to clearing.

#### 4.2.3 Land Use

#### 4.2.3.1 No Action Alternative

Under the no action alternative the area occupied by the easement(s) and SR 85 would remain paved hard surface. The 77SFW/McWhorter roads would be maintained along with shoulder and easements on both sides. The area with the near bounds (1,000 feet) would remain as it is currently configured for the foreseeable future.

## 4.2.3.2 Alternative A (Preferred)

The forested area would be reduced to accommodate the on and off ramps by 15.4 acres. The forest would be cut back for safety and as part of the movement of utilities in the immediate area.

Additional forest or savanna (1.85 acres) would be cleared for retention pond(s) as part of the storm water management actions.

Cumulative impact: Associated with the construction would be the use of a borrow pit for suitable construction fill. To the west of the SFG area and within a 2 mile radius are existing borrow pits that may hold suitable soil. The use of the pit is within the intended use of the existing land. Coordination would be required with Eglin AFB (96 CEG) on any use of borrow pits.

## 4.2.3.3 Alternative B,C,D

The forested area would be reduced to accommodate the on and off ramps. (See Table 7 for acreage comparisons) The forest would be cut back for safety and as part of the movement of utilities in the immediate area. Only Alternative B was identified as potentially requiring movement of utilities. The power substation would be in the footprint of the Partial Cloverleaf interchange.

Additional forest or savanna would be cleared for retention pond(s) as part of the storm water management actions. Alternative B & D were identified as utilizing the area inside the ramps as pond areas. This could be accommodated as long at the ponds did not hold water in a way that would create a wetland or a bird/animal habitat.

Cumulative impact: Associated with the construction would be the use of a borrow pit for suitable construction fill. To the west of the SFG area and within a 2 mile radius are existing borrow pits that may hold suitable soil. The use of the pit is within the intended use of the existing land. Coordination would be required with Eglin AFB (96 CEG) on any use of borrow pits.

#### **4.2.4 Safety**

#### 4.2.4.1 No action Alternative

The overriding consideration for the addition of the traffic signal added September 2009 is to reduce traffic accidents and potential fatalities as vehicles are crossing to Duke Field and eventually the 7 SFG compound. The intersection was previously an uncontrolled intersection with a limited center turn lane.

Cumulative Impact: As vehicle traffic increases, the 65 mph high speed corridor could become congested increasing the incidence of rear end collisions (FDOT traffic report 2007). Temporary public safety improvements would include widening the road, lowering the speed limit, additional signals and signs. The overall affect would be increased commute times along the corridor (level of service F).

# 4.2.4.2 Alternative A (preferred)

The proposed action of constructing the overpass projected safety improvement would be to prevent rear end collisions typical of signalized intersections. Cross traffic collisions were the

primary concern with the uncontrolled intersection, and low speed intersection collisions would be the concern with the overpass. The trade off to low speed accidents at the overpass intersections increases public safety when compared to the probability of high speed rear-end collisions with stopped traffic at the traffic signal interchange.

Cumulative impact: The reduced intersection accidents between stopped vehicles and high speed traffic would be measurable. The increased flow through traffic would keep the corridor speeds at 65mph increasing the speed of vehicle/animal collisions.

#### 4.2.4.3 Alternative B,C,D

The 7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study prepared by the USACE contains exhaustive data on the flow of traffic and expected accident types and rates. The relative safety of each design is achieved by matching the features to the expected traffic flow. Alternatives B, C, and D are progressively designed for higher levels of traffic and progressively higher levels of cross traffic.

Cumulative impact: If Alternative A becomes over utilized, it would cause traffic backups on SR85 resulting in rear end collisions. FDOT would examine traffic data to determine if further improvements would be needed and consider altering the configuration to possibly one of the presented alternatives. Traffic projections in the study predict this may happen as soon as 2020 with a high probability of 2050 being the next time this intersection may require reworking.

## 4.2.5 BASH (Bird/Wildlife Air Strike Hazard)

#### 4.2.5.1 No Action Alternative:

Under No Action Alternative a storm water detention pond was constructed along 77SFW. The following FAA selection on maintenance of water and habitat around airfields applies.

Cumulative impact: the new storm water features along 77SFW would require maintenance to ensure they do not contribute to BASH hazards.

## 4.2.5.2 Alternative A (Preferred)

The construction of any stormwater device should take the FAA advisor (below) into consideration. (See Appendix L)

Cumulative impact: Correctly designed and maintained storm water devices should contribute to protecting nearby streams without attracting birds and wildlife.

#### 4.2.5.3 Alternative B,C,D

The considerations for the alternative C are identical to A.

Alternative B &D were both identified in the  $7^{th}$  Special Forces Group Complex – Overpass Traffic Study as not needing a separate pond area as the inside of the ramps provides a natural pond. The construction of such ponds should be in accordance with the FAA BASH prevention plan.

Cumulative impact: Correctly designed and maintained storm water devices should contribute to protecting nearby streams without attracting birds and wildlife.

## 4.2.6 UXO

### 4.2.6.1 All Alternatives:

UXO cautions apply to all activities including the No Action Alternative as UXO hazards can present themselves at any location on the active range from historical or ongoing test activities.

Unexploded ordinance (UXO) is a hazard associated with range activities and any ground breaking event at Eglin. The area to the south west of the proposed project has been cleared in a very limited area to include the current drainage pond. Construction beyond this is hazardous as the area is listed as probable UXO.

No ground intrusive activities (i.e. excavating/digging/grubbing) can take place south/southwest of the intersection of RR 213 and SR 85 without UXO remediation. (Shown as red on elevation map, figure 17)

# 4.2.7 Traffic (Transportation)

# 4.2.7.1 No Action Alternative:

The existing stop signal is covered under the EGLIN AFB 2005 BRAC PROGRAM EIS (FEB 2009) decision and was implemented as an expedient and necessary change to SR 85 traffic for the interim safety of motorists entering and exiting the 7 SFG area. As the 7 SFG is not active at this time and the area is still under construction. All impacts are to the traffic north and south bound as of this writing. Traffic to Duke Field is essentially unchanged. The 7 SFG is expected to occupy their new facility in FY 11, increasing traffic. Pending Supplemental BRAC 2011 EIS decisions may increase Duke Field traffic depending on the alternative selected.

The eventual selection of a housing site for the 6 RB, 7 SFG, Hurlburt Field and Eglin cantonment would affect the traffic patterns in the immediate area. As the location of military housing is not finalized, several assumptions would be used to make the evaluation.

An Estimate of 1/3 of the available new personnel driving to the 7<sup>th</sup> SFG complex potentially adds fewer than 1,000 vehicles to the traffic on SR 85. As SFG operations are day and night time operations, the direction of traffic flow would generally be in the opposite direction of existing 2009 Eglin AFB traffic. The portion of Army traffic coming from points north would add to the general flow of traffic, but the impacts would be to Crestview and the interstate exit. The largest portion of the impact would be to 6-8 am south bound traffic on SR85 and 3-5 pm north bound

traffic as both time already experience heavy traffic. Barracks on site would house nearly 1/3 of the soldiers stationed at 7 SFG, daytime operations would occupy administrative personnel, maintenance and leadership. Field daylight and nighttime activities would involve the bulk of assigned Special Forces in training/field activities. Traffic around Army activities is erratic by the nature of Army scheduling, PT, assemblies, deployments, and normal operations.

As part of the current construction, vehicles are staged along McWhorter road. This would be an acceptable condition for future construction. Timing of any construction would dictate the availability of area for dirt piles and storage of materials onsite. The use of the ground under the high voltage lines on the south side of McWhorter Road may be considered as an alternative to minimize impacts.

Any vehicles parked along McWhorter are required to be compliant with Eglin Storm Water restrictions as well as any permit restrictions as the drainage from McWhorter leads directly to a wetland.

Cumulative impacts: Under the No Action Alternative traffic is already altered by BRAC (as covered in the EGLIN AFB 2005 BRAC PROGRAM EIS (FEB 2009)) and would continue to be heavily impacted by the projected arrival of 2,500 additional 7<sup>th</sup> SFG troops, plus support civilians, families, and infrastructure improvements that would inevitably follow in Crestview and beyond.

Further information on traffic can be found in the  $7^{th}$  Special Forces Group Complex – Overpass Traffic Study.

# 4.2.7.2 Alternative A (preferred)

As discussed in the no action alternative, traffic would increase on SR 85. The overpass would allow for slowing traffic to exit the main corridor before decelerating. Traffic speeds with an overpass typically remain constant (65 mph) allowing for efficient travel. The constant through put of traffic would allow for more vehicles to efficiently use a 4 lane corridor.

Cumulative Impact: The attractive high speed north /south corridor in a region with very limited north/south corridor availability would encourage more travel on the corridor. Eventually, the corridor may require expanding to 6 lanes. Sufficient room is currently available for additional lanes of travel.

# 4.2.7.3 Alternative B,C,D

This is the same as Alternative A.

# 4.2.8 Lighting

### 4.2.8.1 All Alternatives:

The area is a training area utilized by the 6 RB and 7 SFG both on the ground and airborne that would be utilizing night vision goggles. It is requested that any and all new lighting be directed to the ground (shielded) and utilize the minimum amount of foot candles required for traffic safety.

Cumulative Impact: Lighting at night has an impact on habitat. It attracts bats and night feeding birds (on insects) and can be an attractant or deterrent to other animals. Again, lighting should be kept to minimum as to not create artificial light islands and keeping lighting directed is highly desired. Minimal lighting can mean limiting the brightness, shielded lighting to prevent upward lighting, directed lights, timers or sensors to shut down unneeded lighting.

### 4.2.9 Utilities

### 4.2.9.1 No Action Alternative

The No Action alternative has no impact on utilities.

# 4.2.9.2 Alternative A (preferred) and B,C,D

The expansion of the right-of-way and construction activities would potentially require the relocation or modifications of existing gas and water utilities pipelines. The relocation of existing utilities would include electric service poles on the west side of the road, gas, wastewater, and drinking water infrastructure as necessary. This action would interrupt but not long term decrease or increase the service of these utilities to the surrounding areas. Coordination with local utility service providers would ensure no conflicts are experienced.

Cellular towers in the area are not expected to suffer any operational issue; however access from RR 215 should be gated or limited as many more people would be in this area.

The electrical substation to the south east was recently upgraded and expanded in anticipation of the mission growth of the 7 SFG and Duke Field.

The substation is 1,000 feet from the intersection. The intersection design should accommodate the physical space and security needs of the substation. Anti-terrorism design may require a physical barrier that should be installed.

Under Alternative B the substation would be in the footprint of the interchange. Modification to the interchange design or moving the substation would need to be considered.

Construction at the intersection would not adversely impact existing electric, drinking water, or gas service longer than necessary to bypass them. Environmentally, the trenching (moving) of

utilities to new right of way locations would not be anticipated to generate an environmental impacts or sociologic impact. Only alternative B is identified as having Utility impacts.

Additional information on property management and utility right of way can be obtained through 96ECG/CEPP 850-882-8054

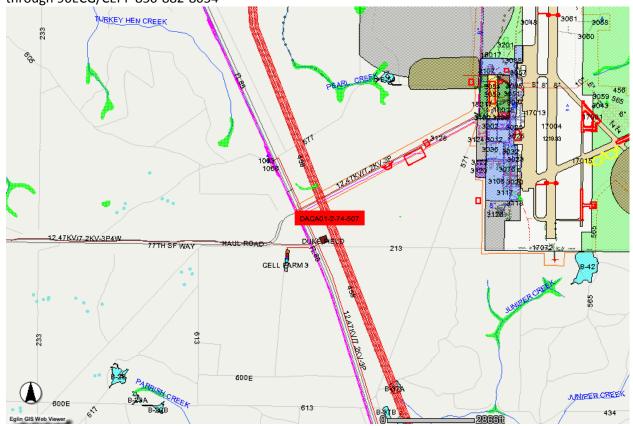


Figure 21 MAP: Utilities

# 4.2.10 Wetlands / Water

### 4.2.10.1 No Action Alternative

The intersection does not cross any bodies of water. The nearest open water is the wetland 400 feet to the north east. Under the no action alternative no change would occur.

# 4.2.10.2 Alternative A (Preferred)

The area to the north east of the intersection is identified as a wetland (green on figure 21 Utility map above). Florida storm water rules require the capturing of runoff of new construction to control the sedimentation and vehicle fluids entering Florida waterways. The presence of the wetland amplifies the need to control the stormwater runoff. It does contribute to complicating the location of stormwater retention ponds as the area to the south west where

the pond was located for the original traffic signal is in an area known to have UXOs. Aggressive stormwater management is expected for all DoD projects. The topography and presence of the wetland may require an offset of the storm water retention pond or the creation of multiple ponds.

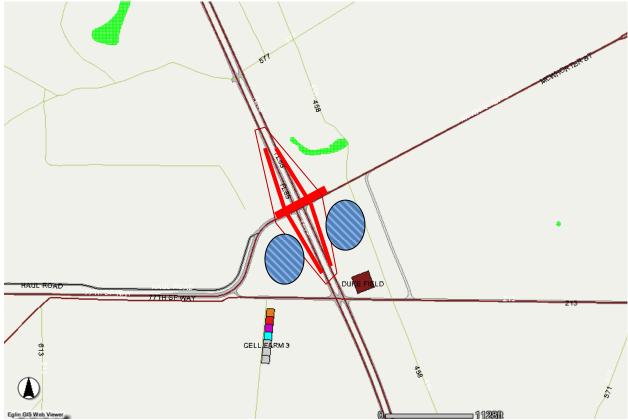


Figure 22 MAP: detention pond location(s)

The location of the storm water control (detention) pond may require re-location in whole or broken up to fit in available areas. 46thTest Wing Safety has pointed out the area to the south west was cleared of any ordinance (UXO) concerns at considerable expense and with a lot of lead time to plan the action. The detention pond as it exists for the traffic signal interchange may suffice; however it cannot be expanded to the south or west (beyond RR 213) without a new UXO clearing. If additional pond acreage is needed it should be to the south east (Duke side) or offset from this intersection.

To avoid a wetland impact, the pond should not drain directly to the wetland, occupy a wetland or have wetland vegetation (see also the FAA Advisory). The south east side (as shown in Alternative B) also has the electrical substation to take into account and security issues created by the substation. The easement should be redrawn to accommodate the pond (or ponds). The detention pond may also be located off-set from the intersection. No additional site is identified in this study for the offset.

Executive Order 11990 requires that the Air Force "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there are no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands. This is called a Finding of No Practical Alternative (FONPA).

Cumulative impact: The creation of artificial drainages should be done in compliance with the FAA Circular on BASH hazards. Properly managed stormwater drainages should protect nearby streams and wetlands.

# **4.2.10.3** Alternatives (B,C,D)

These alternatives locate the detention ponds at different corners of the intersection. The preferred Alternative A model drawing (from the  $7^{th}$  Special Forces Group Complex – Overpass Traffic Study.) places the detention pond on or very near an existing wetland as defined in the Eglin GIS data base. Avoidance of wetland impacts is highly desired so the location of water detention ponds on or near wetlands is mandated. Should the final design include construction in wetlands, Executive Order 11990 requires that the Air Force "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there are no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands. This is called a Finding of No Practical Alternative (FONPA).

The increase in hard surface area would increase storm water runoff. The opportunity for erosion and damage to the roadway and nearby streams would be slightly increased only if construction takes place beyond the project area as currently understood. FDEP requires the aggressive prevention methods to be used to halt stormwater related runoff damage.

Cumulative impact: Required controls and a detention pond are expected to balance the increased hard surface area. The area is on a hill crest of sandy soil. Drainage is excellent and soil percolation is excellent. Seeding grasses and native vegetation normally control erosion sufficiently to eliminate the need for more aggressive measures. The construction and related detention ponds in the area have a positive impact on sediment control and controlling highway pollutants to Florida waterways.

Please note: The proposed design as submitted in the 7<sup>th</sup> Special Forces Group Complex – Overpass Traffic Study did not include detailed environmental analysis and was for modeling purposes only. Changes as proposed to the basic design would accommodate the existing wetlands, RCW, UXO concerns, the electrical substation, and base security. As drawn in this proposal the detention pond is located North East on the Duke Field side of the proposed interchange. The current detention pond for the traffic signal interchange is located to the South West on the 7 SFG side (Alternative D also shows this orientation). Construction to the north east would complicate the NEPA process and add the requirement for an impact analysis to a known

wetland (FONPA). Under all alternatives, it is advisable to avoid any wetland impact. The FDOT design team has been consulted.

Cumulative impact: The creation of artificial drainages should be done in compliance with the FAA Circular on BASH hazards. Properly managed stormwater drainages should protect nearby streams and wetlands. There is a positive long term impact as more controls are placed on runoff from hard highway surfaces under new construction. Short term mitigation is mandated by FDEP for erosion and sediment to wetlands and streams.

### 4.2.11 Cultural Resources

Cultural resource sites are avoided where possible in activities conducted on Eglin AFB, and in the rare cases where they cannot be avoided, strategies are developed between the Base Historic Preservation Officer, the State Historic Preservation Officer and Tribes to recover cultural resources prior to the site-disturbing activity. In the case of building the overpass, previous archaeological investigations revealed no eligible resources to be present. In the event of inadvertent discovery of artifacts, features suspected to potentially have historic or cultural interest, unmarked or lost cemeteries or human remains, activity at the place of discovery will cease. Eglin Cultural Resources Section will immediately be notified (850-882-8459, procedures outlined in the Eglin Air Force Base Integrated Cultural Resource Management Plan and Florida Statute 872.05 will be followed.

The Tribal offices have all been notified by letter and encouraged to comment on the Environmental Assessment. Further they have been coordinated with in advance should artifacts of native origin be discovered in the execution of this or any other project. Letters and responses are in appendices.

# **4.3 Cumulative Impact**

Other activities cumulatively impacting the construction proposal are primarily driven by the 2005 BRAC. The Eglin BRAC 2005 EIS, the SR 85/SR123 Flyway EA, the ongoing housing privatization and actions independent of Eglin in the tourist communities along the beachfront are all contributing to the USACE/ FDOT assessment to improve this intersection. Where appropriate these activities would be included for environmental evaluation.

Geographically, the immediate area of evaluation is the footprint of the project to include all land disturbances, drainage impacts, material pile and borrow pits (if on Eglin). In human terms the cumulative impact would be to delays in traffic during the construction phase, pre-existing conditions and conditions expected after the project is complete. Biologically the cumulative impact would be complex as the loss of acreage is complicated by the increase in traffic flow, the increase in 24 hour and off peak traffic from 7 SFG activities where there was none previously. Eglin Natural Resources Section Biologists comments on this would bear this out. Sociologic cumulative impacts are long term positives and the drivers of completion of the

project. Crestview stands to gain the largest portion of incoming Army families by virtue of location and housing availability. The socioeconomic cumulative impact is likewise positive. Cumulative air, water, waste, and hazardous materials impacts would be addressed as part of the expert testimony under the appropriate heading.

The Okaloosa County Public Works Department has requested a grant under the 2009 Stimulus Bill to substantially improve SR 85. Proposed improvements include upgrading to 6 lanes, adding storm water detention ponds, adding share a ride parking near Crestview and Niceville, upgrading SR 285 to four lanes, and building new cross connecting high speed roads.

The US Army has expressed interest in upgrading a road to the 6<sup>th</sup> Ranger Battalion (6 RB). Several routes internal to Eglin exist. The increase in activity by the 7 SFG and the 6 RB may lead to improvements on RR 211, RR 215, RR 241, RR 600 or the rebuilding of the Holt Bridge. The effect may be more traffic (or reduced) at one or more entrances to SR 85.

The Housing Privatization proposal would have an effect as solders would be traveling to the chosen housing site(s). Traffic would be impacted along that route as well as an associated greater traffic flow to both of the Army units. Army families may be housed at any USAF housing site at Hurlburt Field, the 6 RB, Eglin AFB main or any other site constructed under the Housing Privatization Initiative. USACE calculates the 2011 total contingent at 3,500 persons working at 7 SFG daily. The Army may have 2000 individuals (not housed on site) commuting to 7 SFG. Private housing from throughout the region is expected to provide the majority of the housing.

The BRAC 2005 EIS supplement is expected to have some impact on Duke Field. On a sliding scale, the impact may be very minimal with occasional additional aircraft service and recovery operations to a major change in ground traffic if Duke Field becomes a point of departure and recovery for F-35 training missions. If the changes are sufficient, the McWhorter entrance may require an upgrade along with nearly all Duke Facilities.

### 4.3 Irreversible and Irretrievable commitment of resources

The commitment of any land surface to paving is a commitment of irreversible resources. The borrow pit likewise is a long term commitment. Both can be mitigated and restored at some future date. Up to 30 acres of forage and habitat are lost in the project.

The irretrievable resources include the fuel used, concrete and steel placed, asphalt used and any other disposable construction materials. Note that as both a conservation measure and cost savings, asphalt is commonly reused on site as road bed or to supplement the mix of new material. Concrete likewise may be crushed and used as gravel or fill, or concrete chunks may be employed as erosion controls and artificial jetties.

Cumulative Effects not discussed are the larger scope of the affects of the improved traffic flow helping grow the economy of NW Florida. Any such growth would cause more environmental damage, as populations demand more schools, utilities, roads, services, businesses and homes. The direct contribution of the overpass is difficult to measure.

Not installing the overpass (no action alternative) has irretrievable impacts associated from the increase consumption of fuels and increase in air pollutants related to stopping SR 85 traffic.

# Appendix A: Persons consulted in the writing of EA

Larry Barfield, PBS&J for FDOT District 3

Dr. Paul Bolduc, 96 CEG/CEVSP, Physical Scientist/NEPA, 850-882-4436

Hank Birdsong, 96 CEG/CEVCE, Engineer, 850-882-7661

Marty Daniel, Wildlife Biologist, USDA Wildlife Services, AAC/SEF 850-882-7352

Jim DeVries, Florida Department of Transportation

Charles Garger, 46 OG Unit Environmental Coordinator, 850-882-8709

Bruce Hagedorn, 96 CEG/CEVSN, Biologist, Eglin Natural Resources Section. 850-882-8421

Thomas Hefferman, 46 TW/XPXE, YD-02, 850-872-6640

Thomas Murray, 96 CEG/CEPP, General Engineer/Programmer, 850-882-8680

Michael Jago, 96 CEG/CEVSP, Scientist, NEPA Analyst/ EA author 850-882-1805

Kelly Knight, 96 CEG/CEVSNW, Eglin Natural Resources Section, 850-883-5525

Tracy Ludyjan-Ybarra, FDOT Florida Department of Transportation

Bob Miller, 96 CEG/CEVSNW, Eglin Natural Resources Section, 850-883-5525

R. Lynn Shreve, 96 CEG/CEVSH, Eglin Cultural Resources Section, 850-883-5201

Danielle Slaterpryce, Okaloosa County Public Works

# Appendix B: Reference materials and other documents

Florida Department of Transportation Flyover (SR-85/SR123 Interchange) at Eglin AFB, FL Final Environmental Baseline Survey, May 2007 Florida DOT Flyover (SR-85/SR-123 Interchange)

Florida Department of Transportation Flyover (SR-85/SR123 Interchange) at Eglin AFB, FL Environmental Assessment, March 2007 file://em-

main/data\$/Orgs/EnvironmentalManagement/emuser/Data/Transfer/EA%20CD/2004/Flyover% 20(886)/Final%20SR 85 EA.pdf

Okaloosa County Comprehensive Plan, Revised by Ord. 02-25 Effective February 21, 2003 Pg 4.3 http://www.co.okaloosa.fl.us/dept\_growth\_mgmt\_comp\_plans.html

Hazardous Wildlife Attractants on or Near Airports, U.S. Department of Transportation Federal Aviation Administration, Advisory Circular 8/28/2007 AC No 150/5200-33B

Integrated Natural Resources Management Plan, Eglin Air Force Base, Florida April 2002 RCS 00-826

Eglin BRAC EIS Joint Strike Fighter and 7<sup>th</sup> SFG, 2006 RCS 06-347

Duke Master Plan, April 2004 RCS 03-967

Military Family Housing Privatization Environmental Impact Statement, 2006 (unsigned) pending revision and signature 2011

Institute of Transportation Engineers (ITE) Trip Generation Report (8th Edition, Volume 3 of 3) dated 2008, Military Base data plot and equation

"7th Special Forces Group Complex Area 1 Traffic Study" dated 2008

# Appendix C: Eglin Letter to SHPO



DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR ARMAMENT CENTER (AFMC) EGLIN AIR FORCE BASE, FLORIDA

1 2 OCT 2006

Het says and a

Maria D. Rodriguez Chief, Cultural Resources Branch 96 CEG/CEVH 501 Deleon St., Suite 101 Eglin AFB FL 32542-5105

Frederick Gaske
Director, Division of Historical Resources
Department of State
ATTN: Review and Compliance Section
R.A. Gray Bldg
500 South Bronough St
Tallahassee FL 32399-0250

Dear Mr. Gaske

Enclosed with this letter is a copy of the report Survey of X-823, X-824, X-825, X-826,X-827, X-828, X-829, and Test & Evaluation of 80K252, 80K2351, and 80K2352, Cultural Resources Investigations, Eglin Air Force Base, Okaloosa, Santa Rosa, and Walton Counties, Florida, produced by Prentice Thomas and Associates, Inc., along with supplemental documentation. The fieldwork was performed in accordance with procedures and methods described in the Historic Preservation Compliance Review Program (1990).

During the course of the survey for X-823 two sites, 80K2490 and 80K2491, were discovered. Both sites were determined to be ineligible for listing in the <u>National Register of Historic Places</u>.

During the course of the survey for X-824, one site, 80K2485, was identified. It was determined to be potentially eligible for listing in the <u>National Register of Historic Places</u>.

The investigation of X-825 resulted in the discovery of one site, 80K2484. It was determined to be ineligible for listing in the <u>National Register of Historic Places</u>.

The investigation of X-826 resulted in the discovery of no sites. No further work is recommended.

The investigation of X-827 resulted in the discovery of one site, 80K2489. Additionally, a previously known site that was thought to be outside the survey area was found to be misplotted; correct plotting has 80K173 slightly overlapping X-827. Both sites were determined to be ineligible for listing in the National Register of Historic Places. Eglin concurs with the findings of all these investigations.

The investigation of X-828 resulted in the discovery of no sites. No further work is recommended.

The investigation of X-829 resulted in the discovery of no sites. No further work is recommended.

In addition, three sites, 8OK251, 8OK2351, and 8OK2352, were tested to determine whether or not they qualified for NRHP nomination. All were recommended for testing based on the prehistoric components. During the course of testing, a historic scatter was identified at 8OK251. The findings from test and evaluation at all three sites, however, resulted in a finding of no significance. None are eligible for nomination to the NRHP; no further work or consideration is required.

With this letter Eglin is notifying you, as required by Section 106 of the NHPA, that it has located all cultural resources within the area of investigation. If your office does not respond within 30 days, it is assumed you concur with the determinations and recommendations in the report.

Eglin is again pleased to work with you in protecting the cultural resources of the Base and the state of Florida. Should you have any questions regarding the report, please contact me at 850-882-8454.

Sincerely

Maria D. Robert J. GS-13

8 Attachments:

1. Report

2. Document Checklist

3. Nine Site Forms

4. Survey Log Sheet

5. SmartForm Diskette

6. Disk Submission Form

7. Seven Large-scale Plot Maps

8. Table of Concordance



# FLORIDA DEPARTMENT OF STATE Sue M. Cobb

Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Maria D. Rodriguez 96 CEG/CEVH 501 Deleon St., Suite 101 Eglin AFB, 32542-5105 November 20, 2006

Re:

DHR Project File No. 2006-09421 / Received by DHR: October 17, 2006 Cultural Resources Survey of X-823, X-824, X-825, X-826, X-827, X-828, & X-829 and Test and Evaluation of 80K251, 80K2351, & 80K2352 Eglin Air Force Base, Okaloosa, Santa Rosa, and Walton Counties, Florida

Dear Ms. Rodriguez:

Our office received and reviewed the above referenced mitigation report in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties, and Chapters 267 and 373, Florida Statutes, for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP), or otherwise of historical, architectural or archaeological value.

In September 2006, Prentice Thomas & Associates (PTA) conducted cultural resources evaluations of X-823 through X-829 on behalf of the Department of the Air Force. PTA located nine archaeological sites (80K173, 80K251, 80K2351, 80K2352, 80K2484, 80K2485, 80K2489, 80K2490, and 80K2491) during the course of the investigation. One of the sites (80K2485) was determined to be potentially eligible for listing in the *NRHP*, but additional testing was suggested to make a final eligibility determination. PTA determined that the remaining sites are ineligible for listing in the *NRHP*.

Based on the information provided, our office concurs with these determinations and finds the submitted report complete and sufficient in accordance with Chapter 1A-46, Florida Administrative Code.

If you have any questions concerning our comments, please contact Scott Sorset, Historic Sites Specialist, by phone at (850) 245-6333, or by electronic mail at <a href="mailto:srsorset@dos.state.fl.us">srsorset@dos.state.fl.us</a>. Your continued interest in protecting Florida's historic properties is appreciated.

Sincerely,

Frederick P. Gaske, Director, and State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

☐ Director's Office (850) 245-6300 • FAX: 245-6436 ☐ Archaeological Research (850) 245-6444 • FAX: 245-6452 ■Historic Preservation (850) 245-6333 • FAX: 245-6437 ☐ Historical Museums (850) 245-6400 • FAX: 245-6433

☐ Southeast Regional Office (954) 467-4990 • FAX: 467-4991 ☐ Northeast Regional Office (904) 825-5045 • FAX: 825-5044 ☐ Central Florida Regional Office (813) 272-3843 • FAX: 272-2340



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR ARMAMENT CENTER (AFMC) EGLIN AIR FORCE BASE, FLORIDA

2 8 JAN 2007

Maria D. Rodriguez Chief, Cultural Resources Branch 96 CEG/CEVH 501 Deleon St., Suite 101 Eglin AFB FL 32542-5105

Frederick Gaske
Director, Division of Historical Resources
Department of State
ATTN: Review and Compliance Section
R.A. Gray Bldg
500 South Bronough St
Tallahassee FL 32399-0250

Dear Mr. Gaske

Enclosed with this letter is a copy of the report <u>Survey of X-851</u>, <u>Cultural Resources Investigations</u>, <u>Eglin Air Force Base</u>, <u>Okaloosa</u>, <u>Santa Rosa</u>, and <u>Walton Counties</u>, <u>Florida</u>, produced by Prentice Thomas and Associates, Inc., along with supplemental documentation. The fieldwork was performed in accordance with procedures and methods described in the Historic Preservation Compliance Review Program (1990).

The work resulted in the discovery of two sites, 80K2518 & 80K2519, and a previously known site was also revisited, 80K172. Based on the results of the survey, all the sites were determined to be ineligible for listing in the <u>National Register of Historic Places</u>. Eglin concurs with the findings of the investigation.

With this letter Eglin is notifying you, as required by Section 106 of the NHPA, that it has located all cultural resources within the area of investigation. If your office does not respond within 30 days, it is assumed you concur with the determinations and recommendations in the report.

Eglin is again pleased to work with you in protecting the cultural resources of the Base and the state of Florida. Should you have any questions regarding the report, please contact me at 850-882-8454.

Sincerely

MARIA D. RODRIGUEZ, GS-13

Attachments on following page.



#### FLORIDA DEPARTMENT OF STATE

#### Kurt S. Browning

Secretary of State DIVISION OF HISTORICAL RESOURCES

Ms. Maria D. Rodriguez 96 CEG/CEVH 501 Deleon St., Suite 101 Eglin AFB, 32542-5105 February 15, 2007

DHR Project File No. 2007-00009 / Received by DHR: January 25, 2007 Cultural Resources Survey of X-851 Eglin Air Force Base, Okaloosa, Santa Rosa, and Walton Counties, Florida

#### Dear Ms. Rodriguez:

Our office received and reviewed the above referenced mitigation report in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties, and Chapters 267 and 373, Florida Statutes, for assessment of possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP), or otherwise of historical, architectural or archaeological

In January 2007, Prentice Thomas & Associates (PTA) conducted cultural resources evaluations of X-851 on behalf of the Department of the Air Force. PTA located three archaeological sites (80K2518, 80K2519 and 80K172) during the course of the investigation and determined them to be ineligible for listing in the NRHP.

It is the opinion of PTA that the proposed project will have no effect on cultural resources listed or eligible for listing in the NRHP. PTA recommended no further cultural resource

Based on the information provided, our office concurs with these determinations and finds the submitted report complete and sufficient in accordance with Chapter 1A-46, Florida Administrative Code.

If you have any questions concerning our comments, please contact Scott Sorset, Historic Sites Specialist, by phone at (850) 245-6333, or by electronic mail at <a href="mailto:srsorset@dos.state.fl.us">srsorset@dos.state.fl.us</a>. Your continued interest in protecting Florida's historic properties is appreciated.

Sincerely,

Frederick P. Gaske, Director, and State Historic Preservation Officer

500 S. Bronough Street . Tallahassee, FL 32399-0250 . http://www.flheritage.com

Director's Office (850) 245-6300 • FAX: 245-6436 ☐ Archaeological Research (850) 245-6444 • FAX: 245-6452 (850) 245-6333 • FAX: 245-6437

(850) 245-6333 • FAX: 245-6437

☐ Historical Museums (850) 245-6400 • FAX: 245-6433

☐ Southeast Regional Office (561) 416-2115 • FAX: 416-2149

□ Northeast Regional Office (904) 825-5045 • FAX: 825-5044 ☐ Central Florida Regional Office (813) 272-3843 • FAX: 272-2340

# **Appendix D: Tibal Notification and Response**



DEPARTMENT OF THE AIR FORCE HEADQUARTERS 96TH AIR BASE WING (AFMC) EGLIN AIR FORCE BASE, FLORIDA

8 0 APR 2010

Rhena L. Shreve Cultural Resources Manager 96 CEG/CEVSH 501 Deleon Street, Suite 101 Eglin AFB FL 32542-5105

Mr. Charles Coleman Tribal Historic Preservation Officer Thlopthlocco Tribal Town I-40, Exit 227 Clearview Road Okemah OK 74859-0188

RE: Notification of No Effect

Dear Mr. Coleman

Eglin Air Force Base, in meeting the requirements of Section 106 of the National Historic Preservation Act (NHPA) and managing cultural resources important to the heritage of the United States, are hereby providing documentation describing an undertaking planned for State Road 85 at the Duke Field entrance, on land managed by Eglin AFB (Attachment 1). The activities associated with this project are not expected to impact historic properties; therefore, we are proposing a finding of "no effect."

The 2005 Defense Realignment and Closure Commission (BRAC) actions will add the U.S. Army's 7th Special Forces Group (7SFG) cantonment to the north-central portion of the Eglin installation (Attachment 2). A significant increase in traffic flow is expected due to increase in population. State Road 85 is already a busy thoroughfare as it is the main route for travel from the north to Eglin AFB. A "Conventional Diamond Interchange" is being proposed to allow for unimpeded north and south bound travel and safe acceleration/deceleration for Duke Field and 7th Special Forces bound traffic to exit and enter (Attachment 3).

Two previous archaeological surveys, X-827 and X-851, were conducted within the area of potential effect (Attachment 4). During these surveys, three late 19<sup>th</sup>/early 20<sup>th</sup>-century historic sites (8OK173, 8OK2519 and 8OK2518) were located and evaluated. The sites were determined to be ineligible for the *National Register of Historic Places*.

#### SEMINOLE TRIBE OF FLORIDA TRIBAL HISTORIC PRESERVATION OFFICE

TRIBAL HISTORIC PRESERVATION OFFICE

SEMINOLE TRIBE OF FLORIDA AH-TAH-THI-KI MUSEUM

> HC-61, BOX 21A CLEWISTON, FL 33440

PHONE: (863) 983-6549 FAX: (863) 902-1117



TRIBAL OFFICERS

CHAIRMAN
MITCHELL CYPRESS
VICE CHAIRMAN
RICHARD BOWERS JR.
SECRETARY
PRISCILLA D. SAYEN
TREASURER
MICHAEL D. TIGER

Rhena L. Shreve Cultural Resource Manager 96 CEG/CEVSH 501 Deleon Street, Suite 501 Eglin AFB, FL 32542-5102

THPO#: 005799

May 21, 2010

Subject: Proposed Conventional Diamond Interchange for State Road 85 at the Duke Field entrance, Eglin AFB, Florida

Dear Ms. Shreve.

The Seminole Tribe of Florida Tribal Historic Preservation Office (STOF-THPO) has received the **Eglin Air Force Base's** correspondence concerning the aforementioned project. The STOF-THPO has no objection to your findings at this time. However, the STOF-THPO would like to be informed if cultural resources that are potentially ancestral or historically relevant to the Seminole Tribe of Florida are inadvertently discovered during the construction process. We thank you for the opportunity to review the information that has been sent to date regarding this project. Please reference to **THPO-005799** for any related issues.

We look forward to working with you in the future.

Sincerely,

Direct routine inquiries to:

Willard Steele, Tribal Historic Preservation Officer Seminole Tribe of Florida Anne Mullins Compliance Review Supervisor annemullins@semtribe.com

Ah-Tah-Thi- Ki Museum, HC-61, Box 21-A, Clewiston, Florida 33440 Phone (863) 902-1113 Fax (863) 902-1117



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS 96TH AIR BASE WING (AFMC) EGLIN AIR FORCE BASE, FLORIDA

0 4 JUN 2010

### MEMORANUM FOR RECORD

RE: Tribal Consultation on Highway 85 Overpass

- I have been involved with tribal consultations at Eglin AFB for more than 16 years, starting
  in early 1994. I am a professional archaeologist/anthropologist and am a federal employee in
  the "Archeology" job series, 0193. I have been the archaeology program manager for Eglin
  since 2001. I have attended two training classes on the Native American Graves Protection
  and Repatriation Act (NAGPRA), in 1994 and 2009, and in 2007 I attended a DoDsponsored Indian consultation and communication course.
- All five federally recognized tribes that are affiliated with Eglin AFB have been contacted regarding the Highway 85 overpass project. None of the tribes have concerns. In my opinion we have made a reasonable effort to give the tribes an opportunity to comment. No further consultation with tribes on this project is warranted.

MARK E. STANLEY, GS-12

# Appendix E: AF form 813 RCS 09-620

| REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS  RES: 09-620  |   |                   | Control Symbol |            |            |    |  |
|---|---|-------------------|----------------|------------|------------|----|--|
|   |   |                   |                |            |            |    |  |
| INSTRUCTIONS: Section I to be completed by Proponent necessary. Reference appropriate item  | <ul> <li>Sections II and III to be completed by Environmental P<br/>number(s).</li> </ul> | lanning Function. | Continue       | on separa  | ate sheets | as |  |
| SECTION I – PROPONENT INFORMATION   |   |                   |                |            |            |    |  |
| 1. TO (Environmental Planning Function) 2.  | FROM (Proponent Organization and functional address                                       | symbol)           | 2a. TEL        | EPHONE     | NO.        |    |  |
| Civ Robert Roof   |   |                   | 070.000        |            |            |    |  |
| 96 CEG/CEVSP  | 96CEG/CEPP  |                   |                | 872-8066 x |            |    |  |
| 3. TITLE OF PROPOSED ACTION   |   |                   |                |            |            |    |  |
| Construct Overpass  |   |                   |                |            |            |    |  |
| 4 DUDDOCE AND NEED FOR ACTION (Identify decision to be see  | ada and acod data)  |                   |                |            |            |    |  |
| 4. PURPOSE AND NEED FOR ACTION (Identify decision to be ma  | ade and need date)  |                   |                |            |            |    |  |
|   | (see attached)  |                   |                |            |            |    |  |
| 5. DESCRIPTION OF ACTION AND ALTERNATIVES (DOPAA) (P  | rovide sufficient details for evaluation of the total action)                             |                   |                |            |            |    |  |
|   | (see attached)  |                   |                |            |            |    |  |
| 6. UNIT ENVIRONMENTAL COORDINATOR (Name and Grade) 6a. SIGNATURE  |   |                   |                | 6b. DATE   |            |    |  |
| Civ Dwight Berrong \\ ELECTRONICALLY SIGNED \\  |   |                   | 8/25/2009      |            |            |    |  |
| SECTION II – PRELIMINARY ENVIRONMENTAL SURVEY (Check appropriate box and describe potential environmental effects including cumulative effects) (+=positive effect; 0=no effect; -= adverse effect; U=unknown effect) |   |                   |                | 0          | -          | U  |  |
| 7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE (Noise, accident potential, encroachment, etc.)  |   |                   |                |            |            | Х  |  |
| 8. AIR QUALITY (Emissions, attainment status, state implementation plan, etc.)  |   |                   |                |            |            | Х  |  |
| 9. WATER RESOURCES (Quality, quantity, source, etc.)  |   |                   |                |            |            | Х  |  |
| 10. SAFETY AND OCCUPATIONAL HEALTH (Asbestos/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.)   |   |                   |                |            |            | Х  |  |
| 11. HAZARDOUS MATERIALS/WASTE (Use/storage/generation, solid waste, etc.)   |   |                   |                |            |            | Х  |  |
| 12. BIOLOGICAL RESOURCES (Wetlands/floodplains, threatened or endangered species, etc.)   |   |                   |                |            |            | Х  |  |
| 13. CULTURAL RESOURCES (Native American burial sites, archaeological, historical, etc.)   |   |                   |                |            |            | Х  |  |
| 14. GEOLOGY AND SOILS (Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)  |   |                   |                |            |            | Х  |  |
| 15. SOCIOECONOMIC (Employment/population projections, school and local fiscal impacts, etc.)  |   |                   |                |            |            | Х  |  |

| 16. OTH  | HER (Pote   | ntial impacts not addressed above.) |  |         |        |      | Х |
|--|---|-------------------------------------|--|---------|--------|------|---|
| SECT   | ION III   | - ENVIRONMENTAL ANALYSIS DETI       | ERMINATION                                   |         |        | ľ    |   |
| 17.  | 17. PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX): ; OR                       |                                     |  |         |        |      |   |
|  | X PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED. |                                     |  |         |        |      |   |
| 18. REN  | MARKS   |                                     |  |         |        |      |   |
|  |   |                                     |  |         |        |      |   |
|  |   |                                     | (see attached)                               |         |        |      |   |
|  |   |                                     |  |         |        |      |   |
| 19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION (Name and Grade) |   |                                     | 19 a. SIGNATURE                              | 19 b. D | ATE    |      |   |
| Thomas L. Chavers, YF-02   |   | navers, YF-02                       |  | 9/25/2  | 2009   |      |   |
|  |   |                                     | \\ ELECTRONICALLY SIGNED \\                  |         |        |      |   |
| AF FO  | ORM 81  | 3, 19990901 (EF-V1)                 | THIS FORM CONSOLIDATES AF FORMS 813 AND 814. | PAGE    | OF PAG | E(S) |   |

#### 4.0 PURPOSE AND NEED FOR ACTION

Purpose:

To build a more effective traffic control at the intersection of McWhorter Avenue and SR 85.

Need:

Traffic at the intersection of McWhorter Avenue (Duke Field Rd) and SR 85 has and would continue to grow. Florida Depart of Transportation has completed a study of this intersection given the incoming mission of 7th Special Forces and increased uses of Duke Field in conjunction with population growth trends and determined the proposed traffic signal is inadequate for traffic flow. Unless an alternative is provided the intersection would be rated at a service level F.

#### 5.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

#### 5.1 Description of the Proposed Action

Construct a diamond overpass at the intersection. The state has examined other alternatives and is strongly in favor of this solution for safety and cost considerations.

# 5.2 Description of Alternatives

Alternatives: 5 alternatives were examined by the report "7th Special Forces Group Complex Overpass Traffic Study" June 2009. They included 4 overpass designs of which the proposed action is one and using a traffic signal interchange. The traffic signal interchange is the method approved under the Eglin BRAC Program 2005 EIS.

No Acton: Under no action, the intersection would slow traffic adding to commute times and contribute to air pollution. The potential for accidents would be increased as traffic increases at the interchange with a proportional opportunity for spills. Noise from stopped and starting traffic would increase with traffic; however there is no residential impact.

#### 17.0 CATEX DESCRIPTION (if any)

#### 18.0 REMARKS

Environmental Assessment is required.

# **Appendix F: Definitions**

AADT is the annual average number of vehicles passing a given point on a roadway during a 24-hour period.

Floodplain means "the lowland and relatively flat areas adjoining inland and coastal waters and other floodprone areas such as offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year. The base floodplain shall be used to designate the 100-year floodplain (one percent chance floodplain). The critical action floodplain is defined as the 500-year floodplain (0.2 percent chance floodplain). [taken from U.S. Water Resources Council in its Floodplain Management Guidelines dated February 10, 1978 (see 40 FR 6030)]"

LOS is a measure of a roadway's operational characteristics; in general, it reflects the amount of congestion and ease of use of a roadway segment by individual drivers. http://www.co.okaloosa.fl.us/dept\_growth\_mgmt\_comp\_plans.html

LOS designations are alphabetic "A" through "F":

- LOS "A" is described as free-flowing traffic at average travel speeds, usually about 90 percent of the free-flow speed, which is typically 55 miles per hour (mph) or higher, and a percent of time following of less than 35 percent.
- LOS "B" is described as reasonably unimpeded operation at average travel speeds, typically between 50 and 55 mph, and a percent of time following of between 35 and 50 percent.
- LOS "C" is described as stable operations; however, the ability to maneuver and change lanes is more restricted than in LOS B, with lower average travel speeds of typically between 45 and 50 mph and a percent of time following of between 50 and 65 percent.
- LOS "D" borders the range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS "D" may be due to high volumes of traffic. Average travel speeds are 40 to 45 mph, and percent of time following is between 65 and 80 percent.
- LOS "E" is characterized by significant delays, with average travel speeds of 30 to 40 mph and percent of time following greater than 80 percent.
- LOS "F" is characterized by traffic flow at speeds of less than 30 mph. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

# Appendix G: Air Data

# AIR QUALITY SUPPLEMENTAL INFORMATION

This appendix provides a general overview of the federal and state regulatory air quality programs and discusses emission factor development and calculations including assumptions employed in the air quality analyses presented in the Air Quality sections of this Environmental Assessment (EA).

## AIR QUALITY PROGRAM OVERVIEW

To protect public health and welfare, the U.S. Environmental Protection Agency (USEPA) has developed numerical concentration-based standards or National Ambient Air Quality Standards (NAAQS) for six "criteria" pollutants (based on health related criteria) under the provisions of the Clean Air Act (CAA) Amendments of 1970. There are two kinds of NAAQS: primary and secondary standards. Primary standards prescribe the maximum permissible concentration in the ambient air to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards prescribe the maximum concentration or level of air quality required to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings (Government Printing Office, no date).

The CAA gives states the authority to establish air quality rules and regulations. These rules and regulations must be equivalent to, or more stringent than, the federal program. The Division of Air Resource Management within the Florida Department of Environmental Protection (FDEP) administers the state's air pollution control program under authority of the Florida Air and Water Pollution Control Act and the Environmental Protection Act.

Florida has adopted the NAAQS as written in the federal regulations (40 Code of Federal Regulations [CFR] Part 51), except Florida has established a more conservative standard for sulfur dioxide (SO<sub>2</sub>). USEPA has set the annual and 24-hour standards for SO<sub>2</sub> at 0.03 parts per million (ppm) (80 micrograms per cubic meter [ $\mu$ g/m³]) and 0.14 ppm (365  $\mu$ g/m³) respectively. Florida has adopted the more stringent annual and 24-hour standards of 0.02 ppm (60  $\mu$ g/m³) and 0.1 ppm (260  $\mu$ g/m³) respectively. In addition, Florida has adopted the national secondary standard of 0.50 ppm (1300  $\mu$ g/m³). Federal and State of Florida (Florida Administrative Code [FAC]) ambient air quality standards are presented in Table D-1.

Based on measured ambient air pollutant concentrations, the USEPA designates areas of the United States as having air quality better than the NAAQS (attainment), worse than the NAAQS (nonattainment), and unclassifiable. Those that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for a particular pollutant are "unclassifiable"

and are treated as attainment until proven otherwise. Attainment areas can be further classified as "maintenance" areas. Maintenance areas are those areas previously classified as nonattainment that have successfully reduced air pollutant concentrations below the standard. Maintenance areas are under special maintenance plans and must operate under some of the nonattainment area plans to ensure compliance with the NAAQS. All areas in the state of Florida are in compliance with the NAAQS.

Each state is required to develop a state implementation plan (SIP) that sets forth how CAA provisions will be imposed within the state. The SIP is the primary means for the implementation, maintenance, and enforcement of the measures needed to attain and maintain the NAAQS within each state and includes control measures, emissions limitations, and other provisions required to attain and maintain the ambient air quality standards. The purpose of the SIP is twofold. First, it must provide a control strategy that will result in the attainment and maintenance of the NAAQS. Second, it must demonstrate that progress is being made in attaining the standards in each nonattainment area.

Florida has a statewide air quality-monitoring network that is operated by the state FDEP State

Air Monitoring Reports. Ambient air quality data from these monitors are used to assess the region's air quality in comparison to the NAAQS. The air quality is monitored for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), particulate matter (PM), and SO2. The monitors tend to be concentrated in areas with the largest population densities. Not all pollutants are monitored in all areas. The air quality monitoring network is used to identify areas where the ambient air quality standards are being violated and plans are needed to reduce pollutant concentration levels to be in attainment with the standards; also included are areas where the ambient standards are being met, but plans are necessary to ensure maintenance of acceptable levels of air quality in the face of anticipated population or industrial growth.

The end-result of this attainment/maintenance analysis is the development of local and statewide strategies for controlling emissions of criteria air pollutants from stationary and mobile sources. The first step in this process is the annual compilation of the ambient air monitoring results, and the second step is the analysis of the monitoring data for general air quality exceedances of the NAAQS as well as pollutant trends.

The FDEP Northwest District operates monitors in several northwest counties, including Bay, Escambia, and Santa Rosa Counties. Over the years of record there have been exceedances (pollutant concentration greater than the numerical standard) of a NAAQS. However, there has not been a violation (occurrence of more exceedances of the standard than is allowed within a specified time period) of an ambient standard (FDEP State Air Monitoring Reports). Currently, the state of Florida is attainment for all criteria pollutants.

#### PROJECT CALCULATIONS: AIR EMISSIONS

### **Regulatory Compliance Methodologies**

Construction-generated air emissions were analyzed to enable comparison to NAAQS and the cumulative impact to the air shed within the affected region of influence (ROI). Activities occurring within the Eglin test area range that have the greatest potential to impact air quality are munitions and vehicle activities including particulate emissions resulting from the dust of unpaved roads and trails. Aircraft emissions have been omitted from this EA, since all aircraft emissions are addressed in the Air Operations Environmental Baseline Document.

To conservatively estimate the potential impact of these operations with short-term ambient air quality, a "closed box assessment" (CBA) was performed. Additionally, the annual emissions were compared to the USEPA 2002 National Emissions Inventory (NEI) for the ROI. Techniques, as well as the emissions calculations and project assumptions, are described below.

#### The Closed Box Assessment

The CBA provides a means to estimate maximum short-term impacts from emissions in a given element of space. For this assessment, a volume of air is defined by vertical and lateral boundaries. For the Eglin, the vertical boundary of altitude established was 3,000 feet above sea level (ASL), and the dimensional area within the Eglin was utilized for lateral boundaries. Several assumptions are incorporated into this technique. First, it assumes that emissions are homogeneously mixed and contained within a defined volume of space throughout which the activities occur.

Second, it assumes that the calculated concentrations of criteria pollutants within the defined box resulting from the operations are representative activities of the maximum resultant ground-level (i.e., sea level) concentrations. Because of these assumptions, the results of these calculations are expected to indicate somewhat higher air quality impacts than those that would result from a more structured dispersion model. However, the results do provide a maximum impact scenario for comparison with established ambient air quality standards.

For this assessment, it was assumed that activities occurring within the Eglin operated randomly. The ceiling altitude of 3,000 feet was chosen as a conservative estimate of the average height for stable temperature inversion common to the area. This type of inversion can significantly inhibit, if not effectively block, vertical mixing and widespread dispersion of some air pollutants. Therefore, pollutants can be considered confined between the base of the inversion and the ground, or that portion of the lower atmosphere commonly termed the *mixing layer*. The mixing-layer height determines the vertical extent of the dispersion process for pollutant releases below the mixing height.

#### **Vehicle Exhaust Calculations**

Vehicle exhaust calculations were developed using emission factors established by USEPA for various vehicle classes. The unit of measure for the vehicle emission factors is represented in grams per vehicle mile traveled. These factors were correlated with the total vehicle mileage traveled on the Eglin Range (a known conservative high number).

Vehicles associated with mission activities were classified into two categories, gas and diesel powered. This method of combining the USEPA's four vehicle classes into two has been previously used in the 2002 Eglin Mobile Source Emissions Inventory. Previously, it has been determined that over 90 percent of the Eglin Range vehicular traffic is gasoline-powered, while the other 9 percent is diesel-powered.

Using the vehicle miles traveled and the percentages of the different vehicle classes, emissions were calculated from vehicle emissions and unpaved road emissions. This provides a conservative estimate of vehicle miles traveled.

Using the assumptions described, the vehicle miles traveled for the individual classes of vehicles were extrapolated. Emissions were ascertained utilizing the emission factors and mathematical expression provided below.

Table B-2 contains the emission factors for each vehicle class.

```
Emissions (tons/yr) = (RRM/TRRM) \times TAYVM \times EF \times CFI
Emissions (\mu g/m_3 \times hr) = (RRM/(TRRM \times TV) \times TAYVM \times EF \times CF2
```

Where:

```
RRM = range \ road \ miles \ (total \ miles \ for \ given \ range)
TRRM = total \ range \ road \ miles \ (Eglin's \ total \ range \ road \ miles)
TAYVM = total \ average \ yearly \ vehicle \ miles \ traveled \ on \ Eglin's \ ranges
TV = closed \ box \ volume
EF = emission \ factor
CF_1 = conversion \ factor \ (1.1E-6)
CF_2 = conversion \ factor \ (3.6E5)
```

CF1 converts from grams to pounds, and then to tons. CF2 converts into micrograms and weights the value over an hour. Vehicle Dust Emissions

When vehicles travel on unpaved surfaces/roads during extended periods of construction, PM is emitted into the air. To determine the amount of total suspended particulate matter (TSP) due to the activities on unpaved roads, several variables must be defined, such as percent surface silt content, mean vehicle weight (tons), mean vehicle speed (miles per hour [mph]), mean number of wheels per vehicle, and some constants.

Silt content was assumed to be a conservative value of 0.001 percent due to Florida's very low material surface silt content (USEPA, 2003). The mean weight of the vehicles traveling on the unpaved roads was determined to be 3 tons, since 91 percent of the vehicles are considered classes I and II, which are mainly light trucks, cars, and suburban-type vehicles with weights ranging from 1.0 to 5.0 tons. Mean vehicle speed was deemed 35 mph. Larger and slower construction vehicles produce less dust so the figure is conservatively high.

This value was based on previous studies, road conditions, and safety precautions considered when driving on unpaved (construction) roads. The variables and assumptions stated above along with the equation below were derived assuming dry road conditions (USEPA, 2003). The following empirical expression was used to estimate the amount in pounds of PM emitted from the unpaved road due to vehicle traffic.

$$E = k \times 5.9 \times (s/12) \times (s/30) \times (w/3)^{0.7} \times (w/4)^{0.5}$$

Where:

VMT = vehicle miles traveled

E = emissions in pounds (lbs)

 $k = particle \ size \ multiplier$ 

s = silt content on road surface (percent)

 $S = mean \ vehicle \ speed \ (mph)$ 

 $W = mean \ vehicle \ weight \ (tons)$ 

w = mean number of wheels per vehicle

#### **CUMULATIVE IMPACT COMPARISON**

To evaluate the range emissions and their impact to the overall ROI, which is defined as Okaloosa, Santa Rosa, and Walton Counties for this document's purposes, the emissions associated with the range activities were compared to the total emissions on a pollutant-by pollutant basis for the ROI's 2002 NEI data. Potential impacts to air quality are then identified as the total emissions of any pollutant that equals 10 percent or more of the ROI's emissions for that specific pollutant. The 10 percent criteria approach is used in the General Conformity Rule as an indicator for impact analysis for nonattainment and maintenance areas.

In accordance with Section 176(c) of the Clean Air Act (CAA), USEPA promulgated the General Conformity Rule that is codified at 40 CFR 51, Subpart W. The provisions of this rule apply to state review of all federal actions submitted pursuant to 40 CFR 51, Subpart W, and incorporated by reference at Rule 62-204.800, FAC. The Conformity Rule only affects federal actions occurring in nonattainment areas (areas that do not meet the NAAQS) and maintenance areas (areas that were classified as nonattainment but now are in attainment). The overpass is located in attainment areas, Eglin AFB would not be required to prepare a conformity

determination for the activities described. Although not necessary, the general concept of the conformity rule was used as a criterion.

For impacts screening in this analysis, however, a more restrictive criterion than required in the General Conformity Rule was used. Rather than comparing emissions from test activities to regional inventories (as required in the General Conformity Rule), emissions were compared to the individual counties potentially impacted, which is a smaller area.

## **National Emissions Inventory**

The NEI is operated under USEPA's Emission Factor and Inventory Group, which prepares the national database of air emissions information with input from numerous state and local air agencies, from tribes, as well as from industry. The database contains information on stationary and mobile sources that emit criteria air pollutants and hazardous air pollutants (HAPs). The database includes estimates of annual emissions, by source, of air pollutants in each area of the country, on an annual basis. The NEI includes emission estimates for all 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. Emissions estimates for individual points or major sources (facilities), as well as county level estimates for area, mobile, and other sources, are available currently for years 1996, 1999, and 2002 for criteria pollutants and HAPs.

Criteria air pollutants are those for which USEPA has set health-based standards. Four of the six criteria pollutants are included in the NEI database.

- CO
- NO<sub>x</sub>
- SO<sub>2</sub>
- PM (PM<sub>10</sub> and PM<sub>25</sub>)

The NEI also includes emissions of volatile organic compounds (VOCs), which are ozone precursors, emitted from motor vehicle fuel distribution and chemical manufacturing, as well as other solvent uses. VOCs react with NOx in the atmosphere to form ozone. The NEI database defines three classes of criteria air pollutant sources.

- Point Sources Stationary sources of emissions, such as an electric power plant, that can
  be identified by name and location. A "major" source emits greater than or equal to a
  threshold amount of at least one criteria pollutant and must be inventoried and
  reported. Many states also inventory and report stationary sources that emit amounts
  below the thresholds for each pollutant.
- Area Sources Small point sources, such as a home or office building, or a diffuse stationary source, such as wildfires or agricultural tilling. These sources do not

individually produce sufficient emissions to qualify as point sources. Dry cleaners are one example (i.e., a single dry cleaner within an inventory area typically will not qualify as a point source), but collectively the emissions from all of the dry-cleaning facilities in the inventory area may be significant and, therefore, must be included in the inventory.

Mobile Sources - Any kind of vehicle or equipment with a gasoline or diesel engine;
 airplane; or ship.

The main sources of criteria pollutant emissions data for the NEI are:

- For electric generating units USEPA's Emission Tracking System/Continuous Emissions Monitoring Data and Department of Energy fuel use data.
- For other large stationary sources State data and older inventories where state data was not submitted.
- For on-road mobile sources The Federal Highway Administration's estimate of vehicle miles traveled and emission factors from USEPA's MOBILE Model.
- For non-road mobile sources USEPA's NONROAD Model.
   For stationary area sources
   State data, USEPA-developed estimates for some sources, and older inventories where state or USEPA data was not submitted.

State and local environmental agencies supply most of the point source data. USEPA's Clean Air Market program supplies emissions data for electric power plants.

**Table 9 National and State Ambient Air Quality Standards** 

| Criteria Pollutant                     | Averaging<br>Time    | Federal Primary<br>NAAQS <sup>8</sup> | Federal Secondary<br>NAAQS <sup>8</sup> | Florida Standard         |
|--|----------------------|---------------------------------------|---|--------------------------|
| Carbon Monoxide (CO)                   | 8-Hour <sup>1</sup>  | 9 ppm<br>(10 mg/m³)                   | No standard                             | 9 ppm<br>(10 μg/m³)      |
|  | 1-hour <sup>2</sup>  | 35 ppm<br>(40 mg/m³)                  | No standard                             | 35 ppm<br>(40 μg/m³)     |
| Lead (Pb)                              | Quarterly            | 1.5 μg/m <sup>3</sup>                 | 1.5 μg/m <sup>3</sup>                   | 1.5 μg/m <sup>3</sup>    |
| Nitrogen Dioxide (NO <sub>2</sub> )    | Annual               | 0.053 ppm<br>(100 μg/m³)              | 0.053 ppm<br>(100 μg/m³)                | 0.053 ppm<br>(100 μg/m³) |
| Particulate Matter < 10 Micrometers in | 24-hour <sup>2</sup> | 150 μg/m <sup>3</sup>                 | 150 μg/m³                               | 50 μg/m <sup>3</sup>     |

| Diameter (PM <sub>10</sub> )       |                       |                          |                          |                          |
|------------------------------------|-----------------------|--------------------------|--------------------------|--------------------------|
| Particulate Matter <2.5Micrometers | Annual <sup>3</sup>   | 15 μg/m³                 | 15 μg/m³                 | 150 μg/m <sup>3</sup>    |
| (PM <sub>2.5</sub> )               | 24-hour <sup>4</sup>  | 35 μg/m <sup>3</sup>     | 35 μg/m <sup>3</sup>     | 15 μg/m <sup>3</sup>     |
|                                    | 1-hour <sup>7ab</sup> | 0.12 ppm                 | 0.12 ppm                 | 65 μg/m <sup>3</sup>     |
|                                    |                       | (235 μg/m <sup>3</sup> ) | (235 μg/m <sup>3</sup> ) | 0.12 ppm                 |
|                                    | 8-hour⁵               | 0.075 ppm                | No standard              | (235 μg/m <sup>3</sup> ) |
|                                    |                       | Ozone (O <sup>3</sup> )  |                          |                          |
| Ozone (O <sub>3</sub> )            |                       | (2008 std)               |                          |                          |
|                                    | 8-hour <sup>6ab</sup> | 0.080 ppm (1997          | 0.08 ppm                 | No standard              |
|                                    |                       | std)                     | (157 ug/m³)              |                          |
|                                    |                       | (157 μg/m <sup>3</sup> ) | (157 μg/m³)              |                          |
|                                    | Annual                | 0.03 ppm                 | No standard              | 0.02 ppm                 |
|                                    |                       | (80 μg/m³)               |                          | (60 μg/m³)               |
|                                    | 24-hour <sup>1</sup>  | 0.14 ppm                 | No standard              | 0.10 ppm                 |
|                                    |                       | (365 μg/m³)              |                          | (SO <sub>2</sub> )       |
| Sulfur Dioxide (SO <sub>2</sub> )  |                       | (303 μβ/ 111 /           |                          | (260 μg/m³)              |
|                                    | 3-hour <sup>1</sup>   | No standard              | 0.50 ppm                 | 0.50 ppm                 |
|                                    |                       |                          | (1300 μg/m³)             | (1300 μg/m³)             |

Source: USEPA, 2008 (Federal Standards)

FAC 62-204.240, 2006 (Florida Standards)

μg/m³ = micrograms per cubic meter; FAC = Florida Administrative Code; mg/m³ = milligrams per cubic meter; PM2.5 = particulate matter less than or equal to 2.5 microns in diameter; ppm = parts per million; USEPA = U.S. Environmental Protection Agency

- 1. Not to be exceeded more than once per year
- 2. Not to be exceeded more than once per year on average over 3 years
- 3. To attain this standard, the 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 ug/m³.
- 4. To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 ug/m³ (effective 17 December 2006).
- 5. To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm (effective 27 May 2008).
  6a. To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone
- concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.
- b. The 1997 standard and the implementation rules for that standard will remain in place for implementation purposes as USEPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.
- 7a. The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is < 1.
- b. As of 15 June 2005, USEPA revoked the 1-hour ozone standard in all areas except the 8-hour ozone nonattainment Early Action Compact Areas.

# References

Florida Department of Environmental Protection (FDEP), 1996. FAC 62-204.240 (1)(a-b). Ambient Air Quality Standards. March 1996.

Government Printing Office, no date, Code of Federal Regulations, Code of Federal Regulations, Title 40, Part 50 (40 CFR 50), <a href="https://www.access.gpo.gov/nara/cfr/cfr-retrieve.html#page1">www.access.gpo.gov/nara/cfr/cfr-retrieve.html#page1</a>.

USEPA, 2003. Environmental Protection Agency, *Office of Air Quality Planning Standards*, *Compilation of Air Pollutant Emission Factors AP-42*, Fifth Edition, Volume I: Stationary Point and Area Sources; web page <a href="https://www.epa.gov/ttn/chief/ap42.html">www.epa.gov/ttn/chief/ap42.html</a>. December 2003.

USEPA, 2008. National Ambient Air Quality Standards (NAAQS). <a href="http://epa.gov/air/criteria.html">http://epa.gov/air/criteria.html</a> . September 2008.

# Appendix H: Designer/User Guide.

An Environmental Assessment once the Record of Decision or FONSI is signed is a contract with the public. This section is a quick checklist of the actions that would be complied with by all parties to insure the contract is carried out.

Under all alternatives (except the No Action Alternative) the following actions and conditions would be required. The EA gives specific and detailed discussion on known or potential impacts. The following list is designed to assist in assuring the minimum environment disturbance.

### **Air Quality**

- Impacts will be minimized by adherence to all state and local regulations and to the FDOT
- Standard Specifications for Road and Bridge Construction. Reasonable precautions to be taken to minimize fugitive particulate emissions during ground-disturbing/construction activities in accordance with Rule 62-296, FAC.

## **Biological Resources**

- Conduct surveys for gopher tortoises in accordance with the FWC Gopher Tortoise Management Plan (adopted in 2007) and current Gopher Tortoise Permitting Guidelines.
- As a result of the surveys, if active burrows are found within 25-feet of the Proposed Action, the following management actions will be implemented:
- coordinate with and provide the FWC a completed gopher tortoise relocation permit
  application in accordance with the approved FWC Gopher Tortoise Management Plan
  (adopted in 2007) and current Gopher Tortoise Permitting Guidelines.
- All staging and storage areas will be sited to avoid impacts to gopher tortoise burrows and habitats.
- Coordinate with the FWC staff, in addition to Eglin NRS and USFWS staff, during design to address wildlife crossings.

#### **Cultural Resources**

 All cultural resource work (pre-construction survey and any artifact recovery) will be conducted according to Eglin AFB and Section 106 guidelines.

- The 96 CEG/CEVH will conduct all necessary consultations and review all reports and project plans. Construction contractor(s) will not violate these agreements.
- Work will not begin until all necessary consultations are complete.
- All agencies and contractors will coordinate with the 96 CEG/CEVH at (850) 882-8459 on any change in plans.
- Archaeological surveys in areas considered high probability by Eglin CR and will mitigate
  for site impacts by avoidance of resources and data recovery where eligible resources
  will be impacted by the project. The site has been cleared for construction by the State
  historic Preservation Office (see letters).

#### **Hazardous Materials**

- Contact the 96 CEG/CEVR if unusual soil coloration and/or odors are detected or if small arms debris is found.
- Hazardous Material is to be present only in quantity necessary for the task requiring it (no excess) and used as directed to minimize the creation of waste.
- Any hazardous wastes (e.g., waste adhesives and paint wastes) generated during construction will be handled by the contractor in accordance with applicable federal and state laws and regulations.
- Any and all UXO hazards are "cleared" prior to the commencement of construction activities.
- Noise and Aesthetics
- Establish landscape, terrain and a vegetated buffer to provide aesthetic value and possible noise attenuation.
- Do not add wetland, invasive or non-native species.
- Do not create attractive habitat for undesired species.

#### **Soils and Erosion**

- Where applicable, rough grade slopes or use terrace slopes to reduce erosion.
- The Air Force requires inspection and maintenance of BMPs under the stormwater construction general permit.

#### **Utilities**

Coordinate and obtain all applicable permits, easements, and/or authorizations prior to the commencement of construction activities that may affect utilities service. Those utilities include, but are not limited to Okaloosa County, Chelco, PowerSouth (formerly Alabama Electric Co-op), Gulf Power, Embarq, Cox Communications, Verizon (formerly MCI), Eglin AFB, NVOC, and Okaloosa County Gas District

#### Water Resources (also see wetlands)

- Permits and site plan designs to include site-specific management requirements for erosion and sediment control.
- Designation of staging and storage areas for use of construction equipment.
- Entrenched silt fencing and staked hay bales or other approved alternate controls to be installed and maintained along the perimeter during construction and staging and storage areas.
- Inspection of silt fencing on a weekly basis and after rain events. Replace fencing as needed.
- Stockpiles would be removed in a timely manner.
- Waste receptacles, including dumpsters, would be covered to prevent rainwater and wildlife from entering. (note bears are known to live here)
- Inclusion of stormwater features designed to control runoff associated with the additional impervious surface, land clearing, grading, and excavating.
- For water quality protection, erosion control blankets/fabric and other applicable
- BMPs would be incorporated reduce soil erosion and prevent sedimentation from entering surface waters, floodplains, and wetlands.
- Storage of chemicals, cements, solvents, paints, or other potential water pollutants in locations where they cannot cause runoff pollution into surface waters, floodplains, and wetlands.

#### Wetlands (also see water resources)

Wetlands are present near the project site. No construction is projected at this time that will have any direct impact on the wetland however under the project design wetlands must be delineated. To the maximum extent possible, avoid and minimize direct and indirect disturbance of wetlands through roadway design and innovative construction techniques.

- Develop a mitigation plan to satisfy the requirements of the USACE and NWFWMD/FDEP.
- Direct wetland impacts are by permit only. No direct wetland impacts are anticipated.
- Do not create artificial wetlands (see FAA documents) near airfields! Storm water ponds
  must drain within a few days to prevent the growth of wetlands vegetation and to avoid
  attracting birds and wildlife.

# Appendix I: Federal Agency Coastal Zone Management Act

# FEDERAL AGENCY COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY DETERMINATION

### Introduction

This document provides the State of Florida with the U.S. Air Force's Consistency Determination under CZMA Section 307 and 15 C.F.R. Part 930 sub-part C. The information in this Consistency Determination is provided pursuant to 15 C.F.R. Section 930.39 and Section 307 of the Coastal Zone Management Act, 16 U.S.C. § 1456, as amended, and its implementing regulations at 15 C.F.R. Part 930.

This federal consistency determination addresses the proposed action for the construction of an overpass at State Road (SR) 85 and 77<sup>th</sup> Special Forces Way-McWhorter Road on Eglin Air Force Base (AFB), Florida (Figure 1).

# **Proposed Federal agency action:**

The 2005 Defense Base Closure and Realignment Commission (BRAC) actions to add the US Army 7<sup>th</sup> Special Forces Group (7SFG) to the north central area of Eglin AFB, along with other increases in troop strength throughout the cantonment area, are expected to strain the already busy SR 85 road between Eglin AFB main (cantonment) and Crestview, Florida (Figure 2). It was recognized in the Eglin AFB 2005 BRAC Environmental Impact Statement (EIS) that the SR 85 intersection of the roads from the new 7SFG cantonment and Duke Field would be a problem. A traffic signal was recommended as an interim mitigation in the EIS and subsequently installed (completed in Sept. 2009). A full traffic study by the United States Army Corps of Engineers (USACE) was concluded in June 2009 clearly stating the stop light was not an acceptable solution to the type and volume of traffic flow at this intersection as defined by Florida Department of Transportation (FDOT) standards. As traffic is expected to continue to increase at the Florida average historic rate of 3% annually, the interchange will face increasing challenges. Additionally, the USACE and FDOT recognize this as a critical corridor for evacuation and general access on the north/south axis through Eglin. As such, it is designated as a road for unimpeded travel and high flow rate. A traffic stop reduces overall flow and adds a hazard.

Eglin AFB proposes to build a more effective traffic control at the intersection of SR 85 and 77<sup>th</sup> Special Forces Way-McWhorter Road (SR 85/77 SFW) (Figure 3). The construction of a signalized interchange was complete and operational, September 8, 2009, as outlined in the Eglin BRAC Program 2005 EIS Record of Decision signed February 2009. The improvement of the intersection is intended to address the increased impacts of public traffic along the SR 85

corridor and the military traffic to the 7<sup>th</sup> Special Forces and Duke Field as outlined in the BRAC EIS 2005 mitigations to traffic impacts. The interchange would be a conventional diamond interchange configuration to improve traffic flow conditions on SR 85 by creating free flow terminals on both sides with left turns at grade confined to the cross-roads. Because of the volume of left turn movements this alternative will probably require a signal to help moderate the West McWhorter Avenue and 77<sup>th</sup> Special Forces Way high left turn movements. The proposed action is to occur completely on federal lands controlled by Eglin AFB. SR 85 is an easement through Eglin AFB, not Federal Highway Administration (FHWA) or FDOT property. The project is a traffic mitigation action as outlined in the BRAC 2005 EIS for the increases in Eglin AFB missions.

# **Federal Consistency Review**

Statutes addressed as part of the Florida Coastal Zone Management Program consistency review and considered in the analysis of the proposed action are discussed in the following table.

Pursuant to 15 C.F.R. § 930.41, the Florida State Clearinghouse has 60 days from receipt of this document in which to concur with or object to this Consistency Determination, or to request an extension, in writing, under 15 C.F.R. § 930.41(b). Florida's concurrence will be presumed if Eglin AFB does not receive its response on the 60<sup>th</sup> day from receipt of this determination.

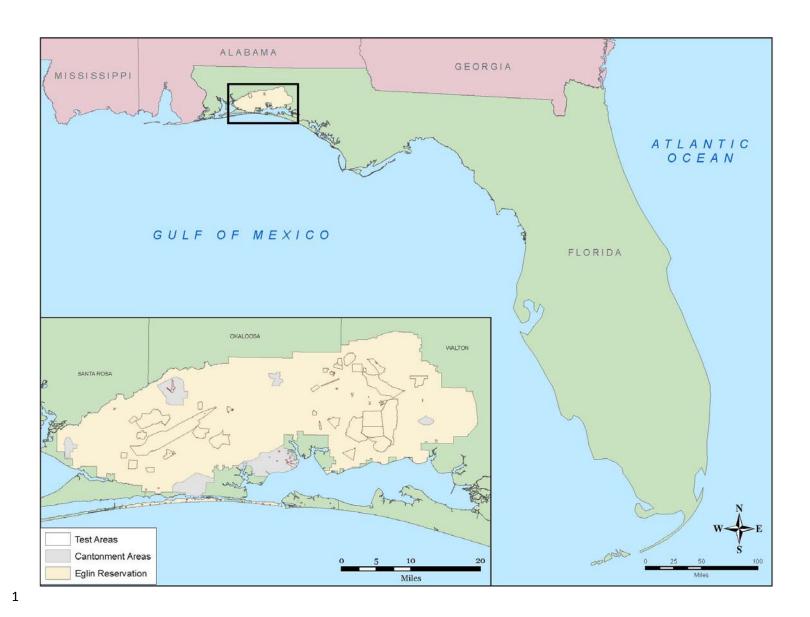


Figure 1. Regional Location of Eglin Air Force Base, FL

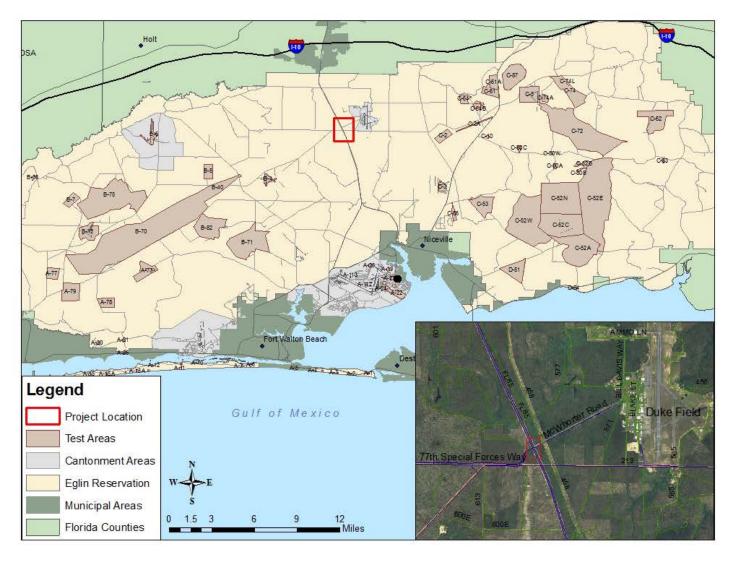


Figure 2. Location of Project on Eglin AFB



Figure 3. Model of Project with Diamond Interchange

# Florida Coastal Management Program Consistency Review

| Statute   | Consistency  | Scope  |
|---|--|--|
| Chapter 161  Beach and Shore  Preservation  | The proposed action would not affect beach and shore management, specifically as it pertains to:  • The Coastal Construction Permit Program.  • The Coastal Construction Control Line (CCCL) Permit Program.  • The Coastal Zone Protection Program.  All land activities would occur on federal property. | Authorizes the Bureau of Beaches and Coastal Systems within DEP to regulate construction on or seaward of the states' beaches.   |
| Chapter 163, Part II  Growth Policy; County and  Municipal Planning; Land  Development Regulation | The proposed action would not affect local government comprehensive plans.   | Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest. |
| Chapter 186  State and Regional Planning  | State and regional agencies will be provided the opportunity to review the Environmental Assessment. Therefore, the proposed action would be consistent with Florida's statutes and regulations regarding state plans for water use, land development or transportation.                                   | Details state-level planning requirements. Requires the development of special statewide plans governing water use, land development, and transportation.  |
| Chapter 252 Emergency Management  | The proposed action would not affect the state's vulnerability to natural disasters.  The proposed action would not affect emergency response and evacuation procedures.   | Provides for planning and implementation of the state's response to, efforts to recover from, and the mitigation of natural and manmade disasters.   |
| Chapter 253 State Lands   | All activities would occur on federal property; therefore the proposed action would not affect state public lands.   | Addresses the state's administration of public lands and property of this state and provides direction regarding the acquisition, disposal, and management of all state lands.                         |
| Chapter 258   | The proposed action would not affect state parks, recreational areas and   | Addresses administration and management of state parks and   |

| State Parks and Preserves  | aquatic preserves.   | preserves (Chapter 258).  |
|--|--|---|
| Chapter 259  Land Acquisition for  Conservation or Recreation                                | The proposed action would not affect tourism and/or outdoor recreation.  | Authorizes acquisition of environmentally endangered lands and outdoor recreation lands (Chapter 259).  |
| Chapter 260  Recreational Trails System  | The proposed action would not include the acquisition of land and would not affect the Greenways and Trails Program.   | Authorizes acquisition of land to create a recreational trails system and to facilitate management of the system (Chapter 260).   |
| Chapter 375  Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation | The proposed action would not affect opportunities for recreation on state lands.  | Develops comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate need for additional recreational opportunities, and propose means to meet the identified needs (Chapter 375). |
| Chapter 267  Historical Resources  | The proposed action would not affect cultural resources of the state. However, in the event that additional archaeological resources are inadvertently discovered during construction, 96th CEG/CEVH, Cultural Resources Branch would be notified immediately and further ground-disturbing activities would cease in that area. Identified resources would be managed in compliance with Federal law and Air Force regulations. | Addresses management and preservation of the state's archaeological and historical resources.   |
| Chapter 288  Commercial Development and Capital Improvements                                 | The proposed action would not affect future business opportunities on state lands, or the promotion of tourism in the region.  | Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy.   |
| Chapter 334  Transportation  Administration  | Minor short-term effects are anticipated in regards to the construction of the overpass. Traffic from construction vehicles would comprise a small percentage of the total existing traffic. Traffic congestion and delays could occur   | Addresses the state's policy concerning transportation administration (Chapter 334).  |

|  | during rush hours.   |  |
|--|--|--|
|  | The construction of the overpass would allow for slowing traffic to exit the main corridor before decelerating. Traffic speeds with an overpass typically remain constant (65 mph) allowing for efficient travel. The constant through put of traffic will allow for more vehicles to efficiently use a 4 lane corridor. Therefore, the completed overpass would have a positive impact on the current traffic situation on SR 85.   |  |
| Chapter 339  Transportation Finance and Planning | The proposed action would not affect the finance and planning needs of the state's transportation system.  | Addresses the finance and planning needs of the state's transportation system (Chapter 339). |
| Chapter 370 Saltwater Fisheries                  | The proposed action would not affect saltwater fisheries.  | Addresses management and protection of the state's saltwater fisheries.                      |
| Chapter 372 Wildlife                             | Construction activities may have an indirect localized effect on native terrestrial wildlife species. However, it is anticipated that these species would either move to another location or remain within the area and utilize adjacent habitat.  Eglin AFB Natural Resources Section will be coordinating a "No Effect" determination with the USFWS under Section 7 of the ESA in regards to the red-cockaded woodpecker and eastern indigo snake (Figure 3).  Prior to project initiation a gopher tortoise survey is required. If a gopher tortoise burrow cannot be avoided, then the tortoise would be relocated in accordance with the Florida Fish and Wildlife Conservation Commission (FWC) protocols.  Therefore, the proposed action would be | Addresses the management of the wildlife resources of the state.                             |

|                             | consistent with the State's policies concerning the protection of wildlife and other natural resources.   |  |
|-----------------------------|---|--|
| Chapter 373 Water Resources | Eglin's Water Resources Section, 96 CEG/CEVCE, would coordinate all applicable permits in accordance with the Florida Administrative Code (FAC). An Environmental Resource Permit (ERP) from the Northwest Florida Water Management District (NWFWMD) per FAC   | Addresses the state's policy concerning water resources. |
|                             | 62-346 may be required for the proposed action.  The proposed action would increase the potential for impact from the increased rate and volume of stormwater runoff, due to an increase in impervious surface area. In order to limit the effects the proposed action would have on water resources, Best Management Practices such as preserving vegetation for as long as possible and stabilizing disturbed areas would be applied to control erosion and stormwater runoff.  |  |
|                             | Applicable permitting requirements would be satisfied in accordance with 62-25 of the FAC and National Pollutant Discharge Elimination System (NPDES). Eglin AFB would submit a notice of intent to use the generic permit for stormwater discharge under the NPDES program prior to project initiation according to Section 403.0885, Florida Statutes (FS). The proposed action would also require coverage under the generic permit for stormwater discharge from construction activities that disturb one or more acres of land (FAC 62-621). |  |
|                             | The proposed action would include the construction of a stormwater retention pond in accordance with FAC 62-25.  Therefore, the proposed action would be  |  |

|  | consistent with Florida's statutes and regulations regarding the water resources of the state.   |  |
|--|--|--|
| Chapter 376  Pollutant Discharge  Prevention and Removal | Any construction area larger than one acre would require a National Pollutant Discharge Elimination System (NPDES) General Permit under 40 CFR 122.26(b)(14)(x). A stormwater pollution prevention plan would also be required under the NPDES permit before beginning construction activities.  | Regulates transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges.                        |
|  | Therefore, the proposed action would be consistent with Florida's statutes and regulations regarding the transfer, storage, or transportation of pollutants.   |  |
| Chapter 377  Energy Resources                            | The proposed action would not affect energy resource production, including oil and gas, and/or the transportation of oil and gas.  | Addresses regulation, planning, and development of oil and gas resources of the state.                                     |
| Chapter 380  Land and Water  Management                  | The proposed action would occur on federally owned lands.  The proposed action would not affect development of state lands with regional (i.e. more than one county) impacts. The proposed action would not include changes to coastal infrastructure such as capacity increases of existing coastal infrastructure, or use of state funds for infrastructure planning, designing or construction. | Establishes land and water management policies to guide and coordinate local decisions relating to growth and development. |
| Chapter 381  Public Health, General  Provisions          | The proposed action would not affect the state's policy concerning the public health system.   | Establishes public policy concerning the state's public health system.   |
| Chapter 388  Mosquito Control                            | The proposed action would not affect mosquito control efforts.   | Addresses mosquito control effort in the state.  |
| Chapter 403  | Eglin's Water Resources Section, 96 CEG/CEVCE, would coordinate all  | Establishes public policy concerning   |

| Environmental Control                    | applicable permits in accordance with the Florida Administrative Code (FAC).  Eglin AFB would take reasonable precautions to minimize fugitive particulate (dust) emissions during any ground disturbing/construction/renovation activities in accordance with FAC 62-296.  Coordination of contractors with all local | environmental control in the state.                      |
|--|--|--|
|  | county and private landfill operators prior to construction would minimize any potential impacts associated with disposal of construction debris.  |  |
|  | Therefore, the proposed action would be consistent with Florida's statutes and regulations regarding water quality, air quality, pollution control, solid waste management, or other environmental control efforts.  |  |
| Chapter 582  Soil and Water Conservation | All applicable Best Management Practices, such as preserving vegetation for as long as possible and stabilizing disturbed areas would be applied to minimize erosion and storm water run- off, and to regulate sediment control. Therefore, the proposed action would not affect soil and water conservation efforts.  | Provides for the control and prevention of soil erosion. |

# Appendix J: Florida Clearinghouse Response letter(s)



# Florida Department of **Environmental Protection**

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

Charlie Crist

Jeff Kottkamp

Michael W. Sole Secretary

January 8, 2010

Mr. Michael J. Jago, NEPA Analyst Department of the Air Force 96 CEG/CEVSP 501 DeLeon Street, Suite 101 Eglin AFB, FL 32542-5133

RE:

Department of the Air Force - Draft Environmental Assessment, SR 85 and 77th Special Forces Way-West McWhorter Road Overpass, Eglin Air Force Base -Okaloosa County, Florida. SAI # FL200911245032C

Dear Mr. Jago:

The Florida State Clearinghouse has coordinated a review of the referenced Draft Environmental Assessment (EA) under the following authorities: Presidential Executive Order 12372; Section 403.061(40), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The West Florida Regional Planning Council (WFRPC) recommends that development be constructed in a manner that does not structurally impair or reduce the flow of on-site waterbodies. Construction best management practices should be maintained at all times and include buffers, erosion control devices and landscaping with native vegetation. Staff also recommends the establishment of 30-ft, buffers with perpetual conservation easements around all wetlands, waterbodies and important wildlife habitats. Please see the enclosed WFRPC memorandum for further information.

The Florida Department of Environmental Protection (DEP) advises the U.S. Air Force to coordinate with the Northwest Florida Water Management District's Crestview Field Office, phone (850) 683-5044, for further information on the state's stormwater management and Environmental Resource Permitting requirements.

Based on the information contained in the Draft EA and enclosed state agency comments, the state has determined that, at this stage, the proposed activity is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued

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Mr. Michael J. Jago January 8, 2010 Page 2 of 2

consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process.

Thank you for the opportunity to review the proposed project. Should you have any questions regarding this letter, please contact Ms. Lauren P. Milligan at (850) 245-2170.

Yours sincerely,

Sally B. Mann, Director

Office of Intergovernmental Programs

Jally B. Manu

SBM/lm Enclosures

John Gallagher, WFRPC



nmental Protection

'More Protection, Less Process'

Categories

DEP Home | OIP Home | Contact DEP | Search | DEP Site Map

| Project Infor    | mation  |
|------------------|---|
| Project:         | FL200911245032C   |
| Comments<br>Due: | 12/30/2009  |
| Letter Due:      | 01/08/2010  |
| Description:     | DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL<br>ASSESSMENT, SR 85 AND 77TH SPECIAL FORCES WAY-WEST<br>MCWHORTER ROAD OVERPASS, EGLIN AIR FORCE BASE - OKALOOSA<br>COUNTY, FLORIDA. |
| Keywords:        | USAF - SR 85 & SPECIAL FORCES WAY-WEST MCWHORTER OVERPASS,<br>EGLIN AFB - OKALOOSA  |
| CFDA #:          | 12.200  |

# Agency Comments:

#### WEST FLORIDA RPC - WEST FLORIDA REGIONAL PLANNING COUNCIL

The West Florida Regional Planning Council (WFRPC) recommends that development be constructed in a manner that does not structurally impair or reduce the flow of on-site waterbodies. Construction best management practices should be maintained at all times and include buffers, erosion control devices and landscaping with native vegetation. Staff also recommends the establishment of 30-ft. buffers with conservation easements around all wetlands, waterbodies and important wildlife habitats. Please see the enclosed WFRPC memorandum for more information.

#### COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS

DCA has reviewed this proposal and finds the project consistent with the Okaloosa County Comprehensive Plan and has no concerns or comments.

#### FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

No Comments Received

#### STATE - FLORIDA DEPARTMENT OF STATE

No Comment/Consistent

#### TRANSPORTATION - FLORIDA DEPARTMENT OF TRANSPORTATION

The FDOT Aviation Office and District Three have no comments on this proposal.

#### ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Please coordinate with the Northwest Florida Water Management District's Crestview Field Office, phone (850) 683-5044, for further information on the state's stormwater management and Environmental Resource Permitting requirements.

#### NORTHWEST FLORIDA WMD - NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

No Comment/Consistent

For more information or to submit comments, please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD, M.S. 47 TALLAHASSEE, FLORIDA 32399-3000 TELEPHONE: (850) 245-2161 FAX: (850) 245-2190

Visit the Clearinghouse Home Page to query other projects.

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Cindy Frakes, Chair J.D. Smith, Vice-Chair

Terry A. Joseph, Executive Director

# MEMORANDUM

To:

STATE CLEARINGHOUSE • FAX: (850) 245-2190/(850) 245-2189

Phone: 850-245-2161

From:

John Gallagher, Director, Comprehensive Planning

John.Gallagher@wfrpc.org

Date:

28 December 2009

Subject:

State Clearinghouse Review

| SAI#            | Project Description                            | RPC#            |
|-----------------|--|-----------------|
| FL200911245032C | USAF Draft EA for SR85 & McWhorter Rd Overpass | OK-110-11-24-99 |

|   | No Comments - Generally consistent with the WFSRPP |
|---|--|
| х | Comments Below                                     |

| X | No Comments - Local Jurisdiction |  |
|---|----------------------------------|--|
|   | Comments Attached                |  |

Project: The project is for SR 85 and Special Forces Way-West McWhorter Road Overpass on Eglin Air Force Base Reservation is to replace the stoplight currently at the turnoff to Duke Field with a highway overpass.

Based on the information provided, the Council would like to make the following recommendations/comments. Please note that the recommendations below are based on the Strategic Regional Policy Plan, established under Chapter 93-206, Laws of Florida. Responses to these recommendations are not required.

P.O. Box 11399 • Pensacola, FL 32524-1399 • P: 850.332.7976 • 1.800.228.8914 • F: 850.637.1923 651 West 14<sup>th</sup> Street, Suite E • Panama City, FL 32401 • P: 850.769.4854 • F: 850.784.0456 www.wfrpc.dst.fl.us

#### Environment

#### Priority 1 - Protection of the Region's Surface Water Resources:

Policy 1.1: Prevent the introduction of hazardous toxins and chemicals into the Region's surface water system by business, industrial, and private interests.

Policy 1.2: Prohibit development activities that structurally impair or reduce the flow of the Region's rivers, creeks, branches, streams, (tributaries and surface waters) and standing waters such as ponds and lakes.

Policy 1.5: Protect wetlands from pollution and unnatural degradation due to development.

Policy 1.7: Require buffer zones around water bodies, landscaping techniques that minimize erosion and proper maintenance of onsite domestic waste treatment facilities so as to protect water quality.

Policy 1.8: Develop area-wide stormwater management plans to protect the surface water resources.

Recommendation 1: Development shall be constructed in a manner that does not structurally impair or reduce the flow of any on-site rivers, creeks, branches, streams, tributaries and surface waters at any time.

Recommendation 2: Construction buffers shall be maintained at all time and may include, but is not limited to staked hay bales, staked filter cloth, and planting of native species.

#### Priority 2 - Protection of the Region's Ground Water Resources:

Policy 1.9: Prevent all development activities that would structurally impair the function of high volume recharge areas, or reduce the availability and flow of good quality water to recharge areas

Policy 1.16: Prohibit any activities that would introduce wastes or other by-products into the groundwater system via recharge areas.

Recommendation 1: Leave as much native species in place during construction as opposed to clear cutting.

# Priority 4 - Protection of Natural Systems:

Policy 1.2: Require land development applications to establish buffer zones around estuarine systems, wetlands, and unique uplands that protect these areas from degradation by adjacent land uses, where feasible.

Recommendation 1: Maintain, at a minimum, 30-foot buffers around all wetland, flood plains, bayous/surface water, estuarine systems, unique uplands, and other important wildlife habitats. These buffer areas should also be included in conservation easements. All conservation easements should be granted in perpetuity.

## Transportation

3

The Okaloosa Walton TPO concurs with the need for this project and amended its long range transportation needs plan to include. Should funding be identified the TPO will amend its cost-feasible plan.

COUNTY: OKALOOSA SCH-106-USAF 2009-1008

Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.

Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analog state license or permit.

DATE:

11/24/2009

COMMENTS DUE DATE:

12/30/2009

CLEARANCE DUE DATE:

1/8/2010

SAI#: FL200911245032C

#### MESSAGE:

| STATE AGENCIES   | WATER MNGMNT.                       | OPB POLICY   | RPCS & LOC |
|--|-------------------------------------|--|------------|
| COMMUNITY AFFAIRS  | DISTRICTS                           | UNIT   | GOVS       |
| ENVIRONMENTAL<br>PROTECTION  | NORTHWEST FLORIDA WMD               |  |            |
| FISH and WILDLIFE<br>COMMISSION  |                                     |  |            |
| X STATE  |                                     |  |            |
| TRANSPORTATION   |                                     |  | 3 3        |
|  | Coastal Zone Management Act/Florida | Project Description:   | STURIC P   |
| of the following:  Federal Assistance to State or Local Government (15 CFR 930, Subpart F).  Agencies are required to evaluate the consistency of the activity.  Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection. |                                     | DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT, SRAS FAND 77TH SPECIAL FORCES WAY-WEST STAND MCWHOTER ROAD OVERPASS, EGEN AIR FORCE BASE - OKALOOSA COLOTY & ORD |            |

EO. 12372/NEPA Federal Consistency To: Florida State Clearinghouse AGENCY CONTACT AND COORDINATOR (SCH) No Comment/Consistent No Comment 3900 COMMONWEALTH BOULEVARD MS-47 Consistent/Comments Attached TALLAHASSEE, FLORIDA 32399-3000 Comment Attached Inconsistent/Comments Attached TELEPHONE: (850) 245-2161 Not Applicable FAX: (850) 245-2190 Not Applicable Division of Historical Resources From: Bureau of Historic Preservation Division/Bureau: 85 % A 1- 330 POSS DEC 1 7 2009 HISTORIC PRESERVATION BONE VO OF DEP Office of Intergovt'l Programs

# Appendix K: U.S. Fish and Wildlife Service - No Effect Letter





## DEPARTMENT OF THE AIR FORCE HEADQUARTERS 96TH AIR BASE WING (AFMC) EGLIN AIR FORCE BASE FLORIDA

DEC 0 1 2009

Mr. Stephen M. Seiber Chief, Natural Resources Section 96 CEG/CEVSN 501 De Leon Street, Suite 101 Eglin AFB FL 32542-5133

Ms. Gail Carmody U.S. Fish and Wildlife Service 1601 Balboa Avenue Panama City FL 32405

Dear Ms. Carmody:

The following information is being submitted to fulfill requirements under Section 7 of the Endangered Species Act (ESA). This biological assessment addresses potential impacts to the red-cockaded woodpecker (RCW) and eastern indigo snake associated with the construction of an overpass at State Road (SR) 85 and 77<sup>th</sup> Special Forces Way-McWhorter Road on Eglin Air Force Base (AFB), Florida (Figure 1). Additionally the Florida black bear and gopher tortoise are considered.

## Description of the Proposed Action

The 2005 Defense Base Closure and Realignment Commission (BRAC) actions to add the US Army 7th Special Forces Group (7SFG) to the north central area of Eglin AFB, along with other increases in troop strength throughout the cantonment area, are expected to strain the already busy SR 85 road between Eglin AFB main (cantonment) and Crestview, Florida (Figure 2). It was recognized in the Eglin AFB 2005 BRAC Environmental Impact Statement (EIS) that the SR 85 intersection at the new 7SFG cantonment and Duke Field would be a problem due to increased traffic flow. A traffic signal was recommended as an interim mitigation in the EIS and subsequently installed (completed in September 2009). A full traffic study by the United States Army Corps of Engineers (USACE) was concluded in June 2009 clearly stating the stop light was not an acceptable solution to the type and volume of traffic flow at this intersection as defined by Florida Department of Transportation (FDOT) standards. As traffic is expected to continue to increase at the Florida average historic rate of 3% annually, the interchange will face increasing challenges. Additionally, the USACE and FDOT recognize this as a critical corridor for evacuation and general access on the north/south axis through Eglin AFB. As such, it is designated as a road for unimpeded travel and high flow rate. A traffic stop reduces overall flow and adds a hazard.

Eglin AFB proposes to build a more effective traffic control at the intersection of SR 85 and 77th Special Forces Way-McWhorter Road (SR 85/77 SFW) (Figure 3). The construction of a signalized interchange was complete and operational, September 8, 2009, as outlined in the Eglin BRAC Program 2005 EIS Record of Decision signed February 2009. The improvement of the intersection is intended to address the increased impacts of public traffic along the SR 85 corridor and the military traffic to the 7th Special Forces and Duke Field as outlined in the BRAC EIS 2005 mitigations to traffic impacts. The interchange would be a conventional diamond interchange configuration to improve traffic flow conditions on SR 85 by creating free flow terminals on both sides with left turns at grade confined to the cross-roads. Because of the volume of left turn movements this alternative will probably require a signal to help moderate the West McWhorter Avenue and 77th Special Forces Way high left turn movements. The proposed action is to occur completely on federal lands controlled by Eglin AFB, SR 85 is an easement through Eglin AFB, not Federal Highway Administration (FHWA) or FDOT property. The project is a traffic mitigation action as outlined in the BRAC 2005 EIS for the increases in Eglin AFB missions.

# **Biological Information**

## Red-cockaded Woodpecker

The RCW (Picoldes borealis) is listed as a federally endangered bird species and a state species of special concern. The RCW excavates cavities in live longleaf pine trees that are at least 85 years old. The RCW historically had a habitat range as far north as New Jersey and as far west as Oklahoma. Today, the RCW has been restricted to the southeastern United States, from Florida to Virginia and to southeast Texas, due to a loss of habitat. In the southeast, 98 percent of the longleaf pine forests have been removed, making federal lands such as Eglin AFB primary habitat for the species. Due to the preservation and continuity of longleaf pine forests on Eglin, the Eglin Range has one of the largest remaining populations of RCWs in the country. In 2003, the USFWS identified Eglin AFB as one of thirteen primary core populations for the RCW (U.S. Air Force, 2006).

The removal of longleaf pine trees, degradation of quality habitat, and noise generated from mission-related and other activities are potential threats to the RCW on the Eglin Range. Eglin is executing an approved USFWS management strategy to meet certain growth objectives of the RCW and to obtain increased mission flexibility with the federal requirements for RCW impacts (U.S. Air Force, 2006). The U.S Fish and Wildlife Service species recovery plan for the red-cockaded woodpecker (RCW) established 350 potential breeding groups as the population goal for Eglin and 9 other primary core populations. As of August 6, 2009, a total of 371 potential breeding groups have been documented. This meets Eglin's recovery goal as established in the official species recovery plan. Eglin is currently working with the USFWS to amend the RCW Component Plan to the Integrated Natural Resources Management Plan (INRMP) and

associated Biological Opinion to incorporate new management operations to continue towards the mission flexibility goal of 450 potential breeding groups.

The locations of active RCW cavity trees, which are defined as any tree containing one or more cavities that are utilized by the RCW, are recorded in the Eglin Natural Resources Geographic Information System (GIS). Additionally, inactive RCW cavities, which are defined as those cavities that were once utilized by the RCW but have not shown recent activity, are spatially recorded.

# Eastern Indigo Snake

The eastern indigo snake (Drymarchon corais couperi) is listed as a federal and state threatened species and is the largest nonvenomous snake in North America. The primary reason for its listing is population decline resulting from habitat loss and fragmentation. Movement along travel corridors between seasonal habitats exposes the snake to danger from increased contact with humans. Indigo snakes frequently utilize gopher tortoise burrows and the burrows of others species for overwintering. The snake frequents flatwoods, hammocks, stream bottoms, riparian thickets, and high ground with well-drained, sandy soils. The indigo snake could occur anywhere on Eglin AFB because it uses such a wide variety of habitats (U.S. Air Force, 2006).

The species is extremely uncommon on Eglin AFB with the sighting of only twentynine indigo snakes throughout Eglin AFB from 1956 to 1999. No confirmed indigo snake sightings have been recorded since 1999 (Gault, 2009). Most of these snakes were seen crossing roads or after being killed by vehicles. It is difficult to determine a precise number or even estimate the numbers of these snakes due to the secretive nature of this species (U.S. Air Force, 2006).

# Other Species Considered:

#### Florida Black Bear

The Florida black bear (*Ursus americanus floridanus*) is currently listed as a state threatened species except in Baker and Columbia counties and Apalachicola National Forest. Florida black bear populations are currently found in Florida and Georgia, as well as a small population in Alabama. Reasons for population declines throughout Florida and Georgia include loss of habitat due to urban development and direct mortality due to collisions with vehicles. Eglin AFB is considered to be the smallest population, with an estimated sixty to one-hundred individuals; however, Eglin's black bear population has shown signs of increase since the early 1990s. Black bear in Florida breed in June/July, and young are born in January/February. Most black bears within Eglin AFB utilize the large swamps and floodplain forests in the southwest and northern portions of Eglin AFB, where they feed on fruits, acorns, beetles, and yellow jackets. Black bear sightings have occurred at numerous locations throughout Eglin AFB, the majority of which have been within the interstitial areas (U.S. Air Force, 2006).

# Gopher Tortoise

The gopher tortoise (Gopherus polyphemus), a state-threatened species, is found primarily within the Sandhills and Open Grassland ecological associations on Eglin, where it excavates a tunnel-like burrow for shelter from climatic extremes and refuge from predators. The primary features of good tortoise habitat are sandy soils, open canopy with plenty of sunlight, and abundant food plants (forbs and grasses). Prescribed fire is often employed to maintain these conditions. Nesting occurs during May and June and hatching occurs from August through September. Gopher tortoise burrows are important habitat for many species, including the federally-listed indigo snake (U.S. Air Force, 2006).

# Determination of Impacts

# Red-cockaded Woodpecker

Overpass construction activities may temporarily disturb individuals or populations of RCWs (Figure 3). Foraging RCWs may avoid areas where construction is occurring. Suitable habitat appears to outweigh any negative influences associated with noise due to construction. Observations have indicated that many animals become adapted to human activities and noises (Busnel, 1978). Scientists who have researched the effects of noise on wildlife report that animals may initially react with a startle effect from noises, but adapt over time, so that even this behavior is eradicated (Busnel, 1978). Based on the fact that the RCW population continues to grow at Eglin, including areas in close proximity to test areas, it appears that they have adapted to all of the noises associated with the military mission, including supersonic booms. Overall noise during overpass construction activities would have fewer impacts on RCWs as compared with mission activities. Therefore, Eglin NRS has determined that the Proposed Action would have no effect on the red-cockaded woodpecker.

## Eastern Indigo Snake

The potential impact to the eastern indigo snake would be from direct physical impacts associated with construction equipment. The construction area primarily consists of previously disturbed land within the existing SR 85 right-of-way, which is mainly grass and free of dense vegetation. Most of the existing vegetation located within the project area would be maintained; brush and tree clearing would only occur if necessary for construction. Incidental contact with personnel and equipment could result in trampling of an individual snake. However, this occurrence is considered highly unlikely, as the snake would most likely move away from the area if it sensed a general disturbance in its vicinity. Should an indigo snake be sighted during construction activities, personnel would cease activities until the snake has moved away from the area before resuming work. Eglin NRS has determined that the Proposed Action would have no effect on the eastern indigo snake if the following avoidance and minimization measures are followed:

- Construction personnel would be provided a description of the eastern indigo snake and its protection under Federal Law. Indigo snake signs would be provided by Eglin NRS and posted at the construction site. Personnel would be given instructions not to harass injure, harm, or kill this species.
- Should an indigo snake be sighted, construction personnel would be directed to
  cease any activities and allow the eastern indigo snake sufficient time to move
  away from the site on its own before resurning such activities. Personnel would
  contact Eglin NRS immediately to report the sighting of the snake.

# Other Species Considered:

## Florida Black Bear

Any potential impact to Florida black bear would be from incidental contact with the animal, or disruption of its behavioral habits. In the unlikely event that construction personnel come into contact with a black bear, all activities would cease until the bear has moved away from the area. Personnel should contact Eglin NRS if a black bear is located in the construction area. Therefore Eglin NRS has determined that the Proposed Action would have no impact on the Florida black bear.

## Gopher Tortoise

The potential to impact the gopher tortoise is from direct physical impacts associated with construction activities. Incidental contact with personnel and equipment could result in trampling or crushing of individuals or their burrow. Eglin NRS would conduct a gopher tortoise survey prior to construction activities. If a gopher tortoise burrow is identified within the proposed path of construction, Eglin NRS personnel would investigate the burrow and relocate any gopher tortoise or commensals that may be occupying the burrow. All gopher tortoise or commensal relocation would be performed in accordance with the Florida Fish and Wildlife Conservation Commission (FWC) protocols. In the unlikely event that construction personnel come into contact with a gopher tortoise, all activities would cease until the tortoise has moved away from the area. Eglin NRS has determined that the Proposed Action would have minimal to no impact on the gopher tortoise if the following avoidance and minimization measures are followed:

- Prior to project initiation a gopher tortoise survey is required. Eglin NRS would be contacted one month prior to any ground disturbing activity.
- If a gopher tortoise burrow cannot be avoided, then the tortoise would be relocated in accordance with the FWC protocols.
- Should a gopher tortoise burrow be identified within the proposed path of
  construction by construction personnel, work would cease until Eglin NRS
  personnel have investigated the burrow and relocated any gopher tortoise or
  commensals to a suitable location.

# Conclusion

Eglin NRS has determined that the Proposed Action would have **no effect** on the redcockaded woodpecker and eastern indigo snake provided that the avoidance and
minimization measures listed in this biological assessment are followed. Eglin AFB
would notify the USFWS immediately if it modifies any of the actions considered in this
Proposed Action or if additional information on listed species becomes available, as the
USFWS may require a reinitiation of consultation. If an impact to a listed species occurs
beyond what Eglin has considered in this assessment, all operations would cease and
Eglin would notify the USFWS. Prior to commencement of activities, Eglin would
implement any modifications or conditions resulting from consultation with the USFWS.
Eglin NRS believes this fulfills all requirements of the ESA, and no further action is
necessary.

If you have any questions regarding this letter or any of the proposed activities, please do not hesitate to contact either Mr. Bob Miller (850) 883-1153 or myself at (850) 882-8391.

Sincerely,

STEPHEN M. SEIBER, YF-02 Chief, Natural Resources Section

Attachments: Figures 1-3

# REFERENCES:

Busnel, R. G., 1978. Effects of noise on wildlife. National Institute for agricultural Research, Jouy-en-Josas, 78, France.

Gault, K. 2009. Personal communication via email between Kathy Gault, Eglin Natural Resources Section, Wildlife, and Kelly Knight, SAIC. June 2009.

U.S. Air Force, 2006. Threatened and Endangered Species Component Plan for Eglin AFB, FL. 96 CEG/CEVSN.

# NO EFFECT LETTER REGARDING

IMPACTS TO FEDERALLY LISTED SPECIES RESULTING FROM CONSTRUCTION OF AN OVERPASS AT STATE ROAD 85 AND 77<sup>TH</sup> SPECIAL FORCES WAY-MCWHORTER ROAD EGLIN AIR FORCE BASE, FLORIDA

| Prepared by: | Kelly Knight Environmental Scientist, SAIC Eglin Natural Resources Section | 11/24/09<br>Date |
|--------------|--|------------------|
| Reviewed by: | Bob Miller<br>Endangered Species Biologist                                 | 11/24/05<br>Date |
|              | Bruce Hagedorn Chief, Wildlife Element                                     | ///24/09<br>Date |
|              | Stepken M. Seiber Chief, Eglin Natural Resources Section                   | 11/25/09<br>Date |
| USFWS CONCU  | Project Leader   | 12/3/09<br>Date  |
| FWS Log No.  | U.S. Fish and Wildlife Service<br>Panama City, FL  4/4/0 - 20/0 - I - co86 |                  |

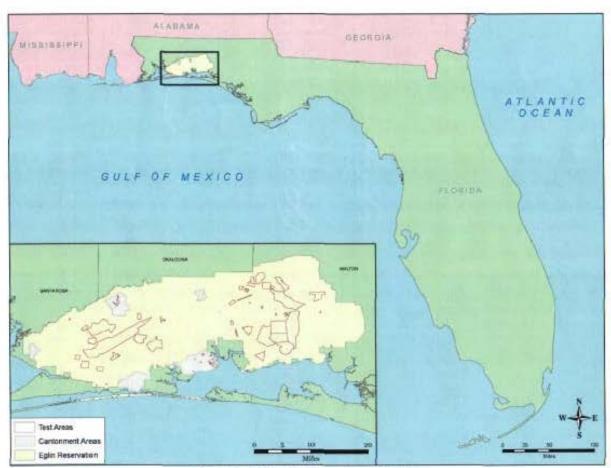


Figure 1. Eglin Air Force Base, Florida



Figure 2. Location of Project Area on Eglin AFB



Figure 3. Sensitive Habitat and Species near Proposed Action

# APPENDIX L: FAA BASH Advisor Circular

USDA Wildlife Services BASH team at Eglin/Duke recommends against any retention facilities that have standing water more than 48 hours and supports the following FAA Advisory Circular quoted in part:

Hazardous Wildlife Attractants on or Near Airports, 8/28/2007, AC No: 150/5200-33B

Pg 1 paragraph 1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING AIRSPACE. For all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.

## Pg 5 paragraph 2-3 section b. NEW STORM WATER MANAGEMENT FACILITIES.

The FAA strongly recommends that off-airport storm water management systems located within the separations identified in Sections 1-2 through 1-4 be designed and operated so as not to create above-ground standing water. Storm water detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. When it is not possible to place these ponds away from an airport's AOA, airport operators should use physical barriers, such as bird balls, wires grids, pillows, or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

## Pg 7-8 paragraph 2-4. WETLANDS.

Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species.

- a. Existing wetlands on or near airport property. If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports. Where required, a WHMP will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.
- c. Mitigation for wetland impacts from airport projects. Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4. (1) Onsite

mitigation of wetland functions. The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge, which cannot be replicated when moved to a different location. Using existing airport property is sometimes the only feasible way to achieve the mitigation ratios mandated in regulatory orders and/or settlement agreements with the resource agencies. Conservation easements are an additional means of providing mitigation for project impacts. Typically the airport operator continues to own the property, and an easement is created stipulating that the property will be maintained as habitat for state or Federally listed species.

Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations. A wildlife damage management biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Sections 1-2 through 1-4 before the mitigation is implemented. A Wildlife Hazard Management Plan (WHMP) should be developed to reduce the wildlife hazards.

Above quoted sections are all from the FAA Advisory Circular. (Hazardous Wildlife Attractants on or Near Airports,8/28/2007, AC No: 150/5200-33B)

# **Appendix M: Letter of Cooperation EFLHD**



Eastern Federal Lands Highway Division 21400 Ridgetop Circle Sterling, VA 20166-6511

## SENT VIA ELECTRONIC CORRESPONDNCE

JAN -8 2010

In Reply Refer to: HFPP-15

Mr. Darryl Hampton Senior Engineer for Access Roads Department of the Army Military Surface Deployment and Distribution Command 709 Ward Drive, Building 1990 Scott Air Force Base, IL 62225

Subject: Eglin Air Force Base, Interchange Project

Dear Mr. Hampton:

In response to your letter dated November 6, 2009, the Eastern Federal Lands Highway Division (EFLHD) would like to accept your request for us to coordinate in the preparation of the National Environmental Policy Act (NEPA) document for the subject project. We will coordinate with our Federal Lands Headquarters office in order to obtain the necessary Defense Access Road (DAR) funding for this work. In addition, we will accept the administration of the design and construction of the project in the future, as soon as funds are identified for the work.

We would again like to thank you for your continued partnership in advancing these significant DAR projects. Please feel free to call Mr. Paul Nishimoto, Planning & Programming Engineer, at 571-434-1598 should you have any questions.

Sincerely yours,

Melisa Ridenour Division Engineer

cc:

Mr. Bryan Hall, Defense Access Road Program, Dept. of Army, SDDC, Scott AFB, IL
Mr. Terry Haussler, Director of Program Delivery, Federal Lands Highway, Federal Highway
Administration (HFL-1), Washington, DC



# **Appendix N: Public Meetings, Notice & Response**

**Public Notification** 

In compliance with the National Environmental Policy Act, Eglin Air Force Base announces the availability of a Draft Environmental Assessment and Finding of No Significant Impact for RCS 09-620 SR 85 and Special Forces Way-West McWhorter Rd Overpass on Eglin Air Force Base, Florida for public review and comment. The Proposed Action of RCS 09-620 SR 85 and Special Forces Way-West McWhorter Rd Overpass on Eglin Air Force Base Reservation is to replace the stoplight currently at the turnoff to Duke Field with a highway overpass. The project part of the development of the 7th Special Forces complex and an action (mitigation) required under the BRAC EIS. The overpass project is designed to improve traffic speeds on SR85 as north/south traffic will no longer have to stop.

Your comments on this Draft EA are requested. You may elect to be included in distribution of a copy of the final document. Letters, email, fax, and other comments may be published in the Final EA. As required by law, comments received before the end of the comment period may be addressed in the Final EA and made available to the public. Oral comments by phone or in person must be made on the record to the 96 ABW Public Affairs officer listed below. Name and address must be included to validate comments. Name and comments only may be included in the final EA. Comments may be addressed by topic (many similar comments on the same topic) or individually. Comments in whole or in part that are not substantial or relevant will not be published.

Copies of the Draft EA and Draft FONSI may be reviewed at the Crestview Public Library 1445 Commerce Drive, Crestview Fla., Fort Walton Beach Public Library, 105 SE Miracle Strip Parkway, Fort Walton Beach, Fla., and Navarre Public Library, 8484 James M. Harvell Rd. Copies will be available for review from Dec. 4, 2009 until Jan. 4, 2010. Comments must be received by Jan. 20th to be included in the final FA

For more information or to comment on these proposed actions, contact: \Mike Spaits, 96 ABW Public Affairs, 101 W. D Ave, Suite 110, Eglin AFB, Florida 32542 or email: mike.spaits@eglin.af.mil. Tel: (850) 882-3931; Fax: (850) 882-3761

Response to Comments for RCS 09-620 77SFW Overpass, Eglin Air Force Base, Florida, Environmental Assessment

A public notice was published in the *Northwest Florida Daily News* on Mar. 22, 2010 to disclose completion of the Draft EA, and selection of the preferred alternative, and request for comments during the 15-day pre-decisional comment period.

The 15-day comment period ended on Apr. 5<sup>th</sup>, with the comments required to this office not later than Apr. 8<sup>th</sup>, 2010. No comments were received during this period.

//Signed//

Mike Spaits

**Public Information Specialist** 



# Published Daily Fort Walton Beach, Florida Distributed in Okaloosa, Santa Rosa & Walton Counties

State of Florida County of Okaloosa

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# French left beats Sarkozy's party

flailing French left made a big-time comeback Sunday, crushing Nicolas Sarkozy's conservatives in regional elections colored by voters' economic worries informally kicking off the 2012 presidential race.

Cheers resounded from Socialist Party headquarters as leftists swept races from the French Riviera to Paris. With 93 percent of ballots counted, the Socialists and their allies won 53.8 percent of the vote nationwide, while Sarkozy's UMP party had 34.97 percent, according to the Interior Ministry.

The results show what a rough road the dynamic but increasingly isolated Sarkozy has ahead of him between now and 2012. Nationwide Prime Minister Francois

ished his party Sunday: train drivers angry over pension reforms that are a pillar of his presidential policy, and teachers angry over job cuts. Meanwhile, he faces new challenges from a popular green movement and a reinvigorated extreme right.

Sunday's vote came close to the "grand slam" sweep of all 26 regions that the Socialists were hoping for. Official results showed the conservatives holding on to Alsace but losing control of Corsica. Those were the only two regions run by the right going into the vote and were two closely watched races.

These elections show that the French are worried,"

was to meet with Sarkozy first thing Monday to discuss the election results, but no major fallout was expected. Sarkozy will follow up the elections with a "modest reshuffle" of the government, his chief of staff Claude Gueant said in an interview with the Catholie daily La Croix

Fillon blamed the recession for his party's bad showing, but warned that France no longer can finance its generous social benefits without cost-cutting and suggested reforms would continue. "We do not govern a great country like France according to the rhythm of local elections," he said.

He lamented the low turnout of 52 percent - better

strikes are planned Tuesday Fillon said. "I take my share by some of those who pun- of the responsibility." Fillon first round but still close to record lows for France.

The conservatives' discomfort was evident. UMP chief Xavier Bertrand and Finance Minister Christine Lagarde were visibly grimacing on post-election talk

Workers across the spectrum are angry over layoffs and worried that planned pension reforms could shrink their old-age income and force them to work longer. Polls show they also are worried about the growing deficit.

Sunday's elections decided the leadership of regional councils concerned with local issues. France has 26 regions, 22 counting the mainland and Corsica, as well as four overseas, from the Caribbean to the Indian

All France's past regional elections have favored the opposition.

The leader of the UMP in the lower house of parliament, Jean-Francois Cope, tried to look past Sunday's dismal results for his party.

"The next stage," he said, "is 2012."

# PUBLIC NOTIFICATION

In compliance with the National Environmental Policy Act, Eglin Air Force Base announces the availability of a Draft Final Environmental Assessment "SR 85 and Special Forces Way-West McWhorter Road Overpass" on Eglin Air Force Base for public review and comment.

The Proposed Action of installing an Overpass at SR85 and Special Forces Way-West McWhorter Road on Eglin Air Force Base Reservation will eliminate the existing stoplight currently at the SR 85 and Duke Field intersection and allow a smoother flow of traffic.

Your comments on this Final Draft EA are requested. Letters and other written or oral comments provided may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided, including private addresses, will be used only to identify your desire to make a statement during the comment period or to compile a mailing list to fulfill requirests for copies of the Final EA. As respected documents fulfill requests for copies of the Final EA or associated documents. However, only the names and respective comments of respondent individuals will be disclosed: personal home addresses and phone numbers will not be published in the Final EA.

The Final Draft Environmental Assessment is available on the web at http://www.eglin.af.mil/environmentalassessments.asp, from Mar. 22 until Apr. 5, 2010. Each of the libraries in Crestview, Fort Walton Beach and Navarre have computers available to the general public and librarians who can provide assistance linking to the document. Hard copies of the document may be available for a limited time by contacting: Mike Spaits, 96th Air Base Wing Environmental Public Affairs, 501 De Leon Street, Suite 101, Eglin AFB, Florida 32542-5133 or email: mailto:spaitsm@eglin.af.mil. Tel: (850) 882-2836; Fax: (850) 882-3761.

For more information or to comment on the Proposed Action, contact Mike Spaits using the contact information given above. Comments must be received by Apr. 8, 2010.



#### Public Comment/EA review sheet

In compliance with the National Environmental Policy Act, Eglin Air Force Base announces the availability of a Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for RCS 09-620 SR 85 and Special Forces Way-West McWhorter Rd Overpass on Eglin Air Force Base Reservation, Florida for public review and comment.

The Proposed Action of RCS 09-620, *SR 85 & Special Forces Way-West McWhorter Rd Overpass* on Eglin Air Force Base Reservation is to replace the stoplight currently at the turnoff to Duke Field with a highway overpass.

Your comments on this Draft EA are requested. You may elect to be included in distribution of a copy of the final document. Letters, email, fax, and other comments may be published in the Final EA. As required by law, comments received before the end of the comment period may be addressed in the Final EA and made available to the public. Oral comments by phone or in person must be made on the record to the 96 ABW Public Affairs officer (as listed below). Name and address must be included to validate comments. Name and comments only may be included in the final EA. Comments may be addressed by topic (many similar comments on the same topic) or individually. Comments in whole or in part that are not substantial or relevant will not be published.

Copies of the Draft EA and Draft FONSI may be reviewed at the Crestview Public Library 1445 Commerce Drive, Crestview Fla., Fort Walton Beach Public Library, 105 SE Miracle Strip Parkway, Fort Walton Beach, Fla., and Navarre Public Library, 8484 James M. Harvell Rd. Copies will be available for review from December 4, 2009 until January 4, 2010. Comments must be received by 4 pm January 4<sup>th</sup> to be included in the final EA.

For more information contact: Mike Spaits, 96 ABW Public Affairs, 101 W. D Ave, Suite 110, Eglin AFB, Florida 32542 or email: mike.spaits@us.af.mil. Tel: (850) 882-3931; Fax: (850) 882-3761

Comments may be mailed/faxed/emailed directly to Public Affairs (see above) or <u>left in the envelope provided</u>. All documents will be picked up by **21 December 2009**. Please include the following information (you may write directly on this document and use the reverse if desired). **Please fill out a sheet if you review this document in whole or in part** even if you have no comments or concerns.

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